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Biodiversity impacts of cocoa cultivation

An assessment with LCA and DOPA approaches

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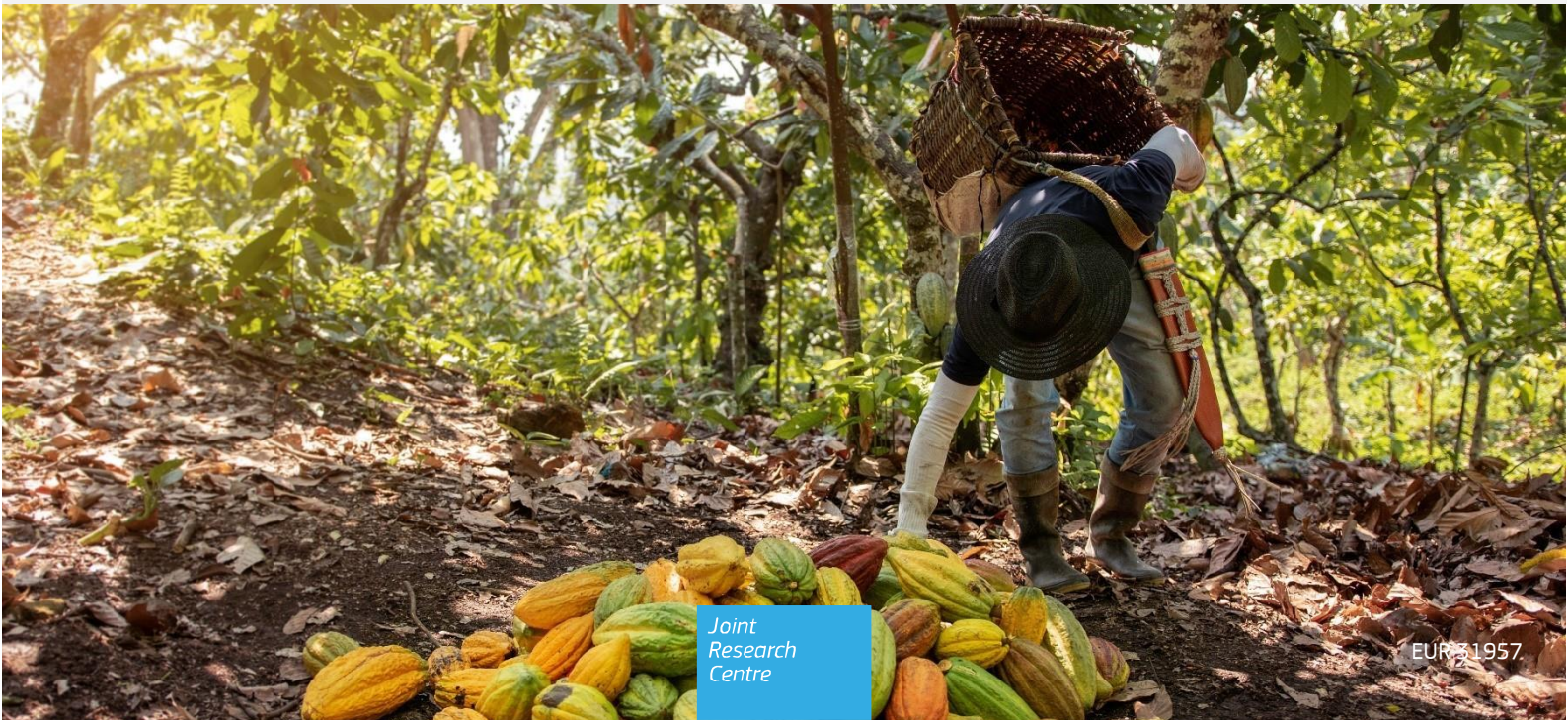

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Contents

Abstract

Biodiversity loss is recognised as one of the top risks that humanity is facing. The EU Biodiversity Strategy for 2030 highlights the need to better integrate biodiversity considerations into decision-making, and commits to the development of methods to measure the environmental footprint of products and organisations. In the field of Life Cycle Assessment (LCA), several methods have been developed to assess biodiversity loss, but a consensus on the most appropriate method is lacking. In this study, two LCA methods focusing on land use impacts were selected to compare biodiversity impacts of cocoa cultivation across different cultivation systems and countries. Biodiversity impacts obtained with the two LCA methods were compared with country rankings in terms of potential biodiversity impacts obtained with the Digital Observatory for Protected Areas (DOPA). Results indicate that, according to the two LCA approaches considering land occupation and transformation as pressures, agroforestry has a higher biodiversity impact per kg of cocoa produced than more intensive cultivation systems, which contradicts some findings from the scientific literature. Further, country rankings in terms of potential biodiversity impacts due to cocoa cultivation differ between LCA and DOPA approaches. These findings are extensively discussed to identify main challenges and possible ways forward. LCA and DOPA are complementary to assess biodiversity impacts due to cocoa cultivation, which would further benefit from field studies.

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1 Introduction

According to recent major global biodiversity assessments (IPBES, 2019; WWF, 2020), global biodiversity is in steep decline, and biodiversity loss has been recognized by a variety of actors as one of the top risks that humanity is facing (United Nations, 2020; Robuchon et al., 2021; WEF, 2023). Thus, recent biodiversity policies have recognized the need of protecting biodiversity by a whole-of-society approach. At the EU level, the European Commission (EC) has published the EU Biodiversity Strategy for 2030 (European Commission, 2020), which highlights the need to better integrate biodiversity considerations into public and business decision-making at all levels, and commits to the development of methods, criteria and standards to measure the environmental footprint of products and organisations on the environment, including the use of life-cycle approaches and natural capital accounting. At the international level, the 196 Parties to the Convention on Biological Diversity (CBD) adopted in December 2022 the Kunming-Montreal Global Biodiversity Framework (CBD, 2022), which stresses the need to take measures to encourage and enable business organisations to regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity along their value chains.

Many studies have linked export-intensive industries with biodiversity threats. In a comprehensive global one, Lenzen et al. (2012) assessed trade biodiversity impacts by linking species threats records to trade flows for over 15.000 commodities. They showed that the USA, the European Union and Japan are the main responsible of trade biodiversity impacts through the commodities they import. Their framework also permitted to associate threats on species to specific commodities. For example, they highlighted that the spider monkey (*Ateles geoffroyi*) is endangered and threatened by habitat loss linked to coffee and cocoa (*Theobroma cacao*) plantations in Mexico and Central America. European countries are the world leader consumers of such commodities[1].

The world's biggest cocoa producing region is Africa (75% in 2019/20), Ivory Coast, Ghana and Cameroon being the biggest producing countries (ICCO, 2022). Cocoa is cultivated in climate zones where it competes with tropical forest. Increasing cocoa demand is driving tropical deforestation (Kroeger et al., 2017) and many cocoa agroforestry systems have been intensified through tree reduction or elimination (Clough et al., 2009). Indeed, full sun cocoa cultivation techniques have started to spread in the 1990s and 2000s, and are gradually replacing shade-grown crops, resulting in plantations with lower biodiversity and higher levels of soil degradation caused by drying and the use of chemical inputs (Amiel et al., 2019). Therefore, the impact of cocoa cultivation on biodiversity occurs through both the loss of tropical forest area to new cocoa plantations and the intensification of farmers' practices in already-established cocoa plantations.

In the context of the European Commission's political priorities, including the European Green Deal[2] and the promotion of deforestation-free products[3], the Commission has launched an informal dialogue in support of a sustainable cocoa sector. This co-called "sustainable cocoa initiative"[4] builds on the process initiated by Ivory Coast and Ghana in June 2019 aiming at increasing the price of cocoa on the world market, and its objective is to increase the sustainability of the cocoa sector in its economical, societal and environmental (including biodiversity) dimensions. The Joint Research Centre (JRC) of the Commission supports this initiative by providing a range of scientific services addressing the different dimensions of the sustainability in the cocoa sector, including biodiversity impact assessments of cocoa cultivation covered in this report.

Life Cycle Assessment (LCA) is a methodology to assess environmental impacts of products and services along their life cycle, from raw material extraction to the use phase and finally in the end of life (ISO, 2006a; ISO, 2006b) caused by different environmental pressures. LCA methodologies first

[1] Data on coffee consumption: https://www.fao.org/markets-and-trade/commodities/coffee/en/; data on cocoa: https://www.fao.org/3/y5143e/y5143e0x.htm

[2] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

[3] https://environment.ec.europa.eu/topics/forests/deforestation/regulation-deforestation-free-products_en

[4] https://international-partnerships.ec.europa.eu/policies/programming/programmes/sustainable-cocoa-initiative_en

model the impacts of pressures on direct drivers of biodiversity loss (midpoint impacts), such as land use and climate change, and then model the impacts of these direct drivers on biodiversity (among other endpoint impacts). A variety of biodiversity assessment methods has been proposed in the LCA context and beyond (Damiani et al., 2023). On the other hand, tools to monitor the state of biodiversity and the pressures it endures could be used to assess the environmental impacts of products and services, even if they were not designed to that aim initially. The Digital Observatory for Protected Areas (DOPA) is a set of web services and applications that can be used primarily to assess the state and the pressure on biodiversity and ecosystem services at multiple scales (protected area, country and ecoregion) (Dubois et al., 2016). Beyond these spatial functionalities, DOPA web services have recently been further developed to provide non-spatial information on species based on information from the Red List of the International Union for the Conservation of Nature (IUCN). Therefore, DOPA web services can now be used to identify which species are affected by which threat in which country. The main difference between LCA and DOPA approaches is that the LCA approach models the impact of different pressures on biodiversity (without explicitly linking it to real species on the ground) while the DOPA approach highlights which species are affected by which threat and where they are affected. Importantly, the DOPA does not create new information on species threats compared to the information provided by the IUCN Red List, it only offers the possibility to exploit this information more easily. As such, information on species threats in the DOPA is the exact same information than the one provided by the IUCN Red List. It relies on publications and expert judgements, and may therefore be biased (e.g. Trull et al., 2018). The main advantage of LCA is that it allows assessing key environmental impacts highlighting possible trade-offs and burden shifting between different impact categories, as well as to identify the most relevant processes and flows behind impact. LCA also allows (i) to compare different services and products and (ii) to compare different practices to produce a same product in terms of environmental impacts (including on biodiversity) with a single metric, and (iii) to explore the effects in changes of consumption patterns or trade regimes.

In the field of LCA, several models and methods (i.e. collection of impact assessment models) have been developed to assess biodiversity loss. Crenna et al. (2020) reviewed approaches for the impact assessment of products' and services' value chains on biodiversity in LCA. They highlighted that the existing metrics of biodiversity impact assessment in LCA are poor at capturing the complexities of biodiversity or are not fully operational to be used by LCA practitioners. Since the review of Crenna et al. (2020), many new proposals to assess biodiversity impacts have been published. Damiani et al. (2023) conducted a new review to complement the previous one with new methods and with more detailed evaluation. However, to fully understand the functioning of the methods and results obtained, testing of the methods should be performed. In this study, two recent LCA methods, which according to authors knowledge have not been not previously tested, were selected to see the differences in the results. The aims of this study are:

1. to compare biodiversity impacts obtained with two recent LCA-based biodiversity methods focusing on land use pressure across different cultivation systems and countries, and
2. to compare the ranking of countries in terms of biodiversity impact obtained with LCA methods focusing on land use pressure with the ranking of countries in terms of potential biodiversity impacts obtained with the DOPA.
3. to compare the ranking of countries in terms of biodiversity impacts obtained with LCA methods focusing only on land use pressure with the ranking of countries with LCA methods including wider amount of pressures beyond land use.

These comparisons were conducted as part of the administrative arrangement "Technical and scientific support to sustainable agriculture, food and nutrition security and food systems, 5th phase" (TS4FNS-5) between the Joint Research Centre and the Directorate-General for International Partnerships to explore (i) the potential of LCA to highlight how biodiversity impacts vary across different cultivation systems and (ii) how the information available through the DOPA could complement LCA approaches in documenting biodiversity impacts from crops cultivation. Cocoa was chosen as the case-study product to carry out these comparisons for several reasons. First, cocoa is

a crop that is mainly produced in tropical countries and imported in Western countries with already documented impacts on biodiversity. Second, cocoa is a crop for which sufficient information on cultivation practices is available in the main producing countries to carry out LCA.

In this report, Chapter 2 describes main perennial crop systems in tropical countries (2.1), gives information on cocoa cultivation in general (2.2) and how cocoa cultivation has been modelled in LCI databases (2.3). Materials and methods are described in Chapter 3, and results are presented in Chapter 4. Chapter 5 focuses on discussion, and finally in Chapter 6 the conclusions are given.

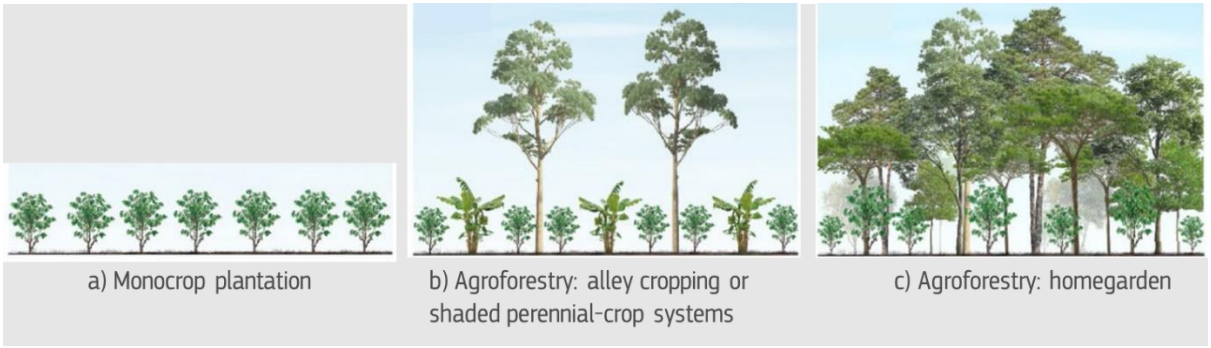
2 Cultivation systems

Different types of farming systems have been developed to adapt to the physical conditions (e.g., climate, altitude, soils) and socio-economic conditions (e.g., land size and tenure, cultural practices, capital, labour availability, access to markets) of different locations and the aim of the farmers (Ruthenberg 1972; CCAFS, 2023). Such a wide variety of situations led to the formation of extremely distinct types of farming systems. Indeed, "no farm is organised exactly like any other" (Ruthenberg 1972). However, although a generic comprehensive system capable to serve all purposes does not exist (Kismányoky, 2016), the different cultivation systems may be categorised according to several different aspects, such as land use and management, intensity of production, technologies and external inputs used. The present study is dedicated to cocoa[5], which is classified as a perennial crop. An overview of farming systems existing for perennial crops in tropical regions[6] is introduced in section 2.1, while section 2.2 introduces the main cultivation practices applied for cocoa according to the different literature sources.

2.1 Main perennial crop systems in tropical countries

Although a unique and consensual definition of perennial crops does not exist, these are identified as plants that live for many years, at least more than two (Bessou et al., 2013), and differentiate from annual crops, which instead are plants living for one year only. According to structural and size characteristics, perennial crops may be distinguished in perennial field crops (e.g. bananas), shrub crops (e.g. coffee and tea) and tree crops (such as cocoa, rubber, coconut-palms, and oil-palms). Two main forms of cultivation of perennial crops may be identified: monocrop plantations and agroforestry systems (Figure 1).

Figure 1. Example of different perennial wood crops cultivation systems. On the left side (illustration a) a monocrop cocoa plantation is shown, followed by a cocoa plantation intercropped with plantains (Musa × paradisiaca) and shadow-trees (illustration b). Illustration c) shows an example of a complex agroforestry systems, where cocoa plants are cultivated along with numerous other plants for food- or other-purposes.



Source: Adapted from Ozorco-Auguilar et al. (2021).

Plantations generally refer to commercial monocrop systems which are intensively cultivated in a large area. Plantation systems are usually implemented for cash crops[7] cultivation (e.g. palm oil, coffee, tea, sugarcane), with the main goal of maximising yields of the single crop cultivated and maximising the profit. These systems usually rely on a high degree of inputs (e.g. fertilisers, pesticides), mechanisation, labour and technical knowledge, especially when they are cultivated for

[5] In this report "cocoa" is used for both cacao tree cultivation and harvested cocoa beans.

[6] In this section, tropical regions are intended on the basis of the geographical concept of the intertropical zones, as described by Mateo et al, 2021.

[7] Cash crops are crops cultivated with the purpose of selling on the market, as distinguished from subsistence crops raised for the farmer self-supply (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Cash_crops).

export purposes. Such kind of plantations are therefore principally grown on large estates (Ruthengerb, 1972).

Agroforestry is a term that refers to a variety of land-use systems, where woody perennials are deliberately grown on the same area and at the same time as agricultural crops and/or animals in the form of a spatial mixture and/or a temporal sequence (FAO, 2015). Two specific features of agroforestry are its multifunctionality and its synergy effect (intended as the combination of several components and their dynamic interactions) (Augere-Granier, 2020), which may provide a wide variety of economic, sociocultural and environmental benefits (FAO, 2015). For instance, cultivating together annual crops with multipurpose trees, that produce food, fodder, timber, and fuelwood, could contribute to food security, decreasing poverty, improving livelihood security, environmental protection and mitigating climate change (Sharma et al. 2022, Ramachandran Nai, 2013). In tropical conditions agroforestry may enhance overall crop productivity, provide additional income and/or income security by the provision of additional crops, increase input use efficiency (such as of water and fertilisers), improve soil quality and fertility, and maintain a higher degree of biodiversity compared to monocrop systems (Liquete et al. 2022, Wezel et al. 2014, Palaniappan and Sivaraman, 1996; INRAE 2021; Mahmud et al., 2020). Depending on the combination of animals, trees and crops, FAO (2015) distinguished three main types of agroforestry: silvoarable (trees and crops), silvopastoral (trees and animals), and agrosilvopastoral (crops, trees and animals). The most common agroforestry practices in the tropics are shown in Table 1, together with a short description.

Table 1. Main agroforestry practices present in tropical countries. Definitions are the one suggested by Ramachandran Nair 2013, whenever not differently specified.

Agroforestry practice	**Description**
Alley cropping (hedgerow intercropping)	Trees or shrubs and agricultural crops are grown in alternate rows (Grebner et al. 2013). The woody species are usually fast-growing, preferably leguminous.
Homegardens	Intimate multi-story combinations of a large number of various trees and crops in homesteads; livestock may or may not be present.
Improved fallow	Land resting from cultivation but the vegetation comprises planted and managed species of leguminous trees, shrubs and herbaceous cover crops (ICRAF, 2013).
Multipurpose trees (MPTs) on farms and rangelands	Fruit trees and other MPTs scattered haphazardly or planted in some systematic arrangements in crop or animal production fields; trees provide fruits, fuelwood, fodder, timber, etc.
Shaded perennial-crop systems	Growing shade-tolerant species such as cocoa and coffee under or in between over-story shade-, timber-, or other commercial tree crops.
Shelterbelts and windbreaks	Use of trees to protect fields from wind damage, sea encroachment, floods, etc.
Taungya	Growing agricultural crops during the early stages of establishment of forestry (timber) plantations.
Silvopasture: • Grazing systems • Cut and carry system (Protein banks)	Integrating trees in animal production systems: – Cattle grazing on pasture under widely spaced or scattered trees; – Stall-feeding of animals with high-quality fodder from trees grown in blocks on farms.

Source: Modified from Ramachadran Nair (2013).

Agroforestry systems should satisfy at least three basic conditions: i) at least two species interact biologically within the farm-plot, ii) at least one of the species is a woody perennial, iii) at least one of the plant species is managed for forage, annual or perennial crop production (Liquete et al. 2022).

Following these conditions, **plantations can be considered agroforestry systems**, whenever intercropping techniques are implemented. Intercropping is a technique applied to annual crops, for example combining the cultivation of cereals with nitrogen-fixing crops (Dagar et al. 2020), but is frequently applied also within plantations systems.

An important distinguishing feature of farming systems is the **proportion of external anthropogenic inputs** (e.g. chemicals, fossil-fuel based resources) used to obtain the agricultural production (Therond et al. 2017). Systems characterised by a simple crop sequence, standardised crop management and systematic use of chemical inputs (especially fertilisers and pesticides) are identified as **chemical input-based** farming systems (Therond et al. 2017). So-called **conventional agriculture** (or "industrialised agriculture") may be ascribed to this category. Although a recognised and agreed definition of "conventional farming" does not exist (Sumber and Giller, 2022), it is generally intended as a system "based on crop specialisation (i.e. monoculture) and on use of external inputs and fossil energy" (Rosati et al. 2021) and characterised with low levels of natural vegetation and heterogeneity. The main aim of such farming systems is to maximise income, through the utilisation of significant external resources, such as synthetic fertilisers and pesticides, using a high level of mechanisation. These systems are commonly considered as unsustainable, generating serious environmental impacts (Foley et al. 2011, Rosati 2021). Nevertheless, modern conventional farming seeks to limit pollution, optimising the inputs use through increasing plant uptake efficiency (Therond et al. 2017). **Precision agriculture** for instance allows an optimisation of external input requirements, decreasing the amount of chemicals used and thus reducing environmental impacts (Cisternas et al. 2020). Farming systems relying on a significant use of fertilisers and agrochemicals are also named "**high-input** farming systems", which are opposed to "**low-input** farming systems", where the use of such inputs is reduced and sometimes absent, seeking to optimise the use of on-farm resources (Solagro and JRC, 2007).

Systems that fully or partially substitute the chemical inputs with organic-based inputs (such as organic fertilisers, pesticides based on natural active principles, industrial natural enemies, or other useful organisms) are identified as "**biological input-based** farming systems", as proposed by Therond et al. (2017). **Organic farming**, where the use of synthetic chemicals is forbidden, is an example of biological input-based systems. The International Federation of Organic Agriculture Movements (IFOAM) – Organics International, defines it as a "production system that sustains the health of soils, ecosystems and people" and "relies on ecological processes, biodiversity and cycles adapted to local conditions", ultimately basing it on four principles: health, ecology, fairness and care (IFOAM, 2023). Systems adopting the **integrated pest managements** (IPM) may be also classified as biological input-based farming systems, since they aim to significantly reduce the use of synthetic agrochemicals through the "careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations" (FAO, 2023).

Therond et al. (2017) propose a third category of farming systems, named "**biodiversity-based** farming systems", that groups those implementing diversified farming systems, even at landscape level, strongly enhancing the ecosystem services provided by biodiversity, thus increasing species and varieties diversity as well as soil cover while reducing the dependency of external inputs and minimising mechanical and chemical disturbances. Examples of such systems are **agroforestry**, **conservation agriculture** (which comprise a set of farming techniques aimed at preserving long-term healthy soils (Liquete et al. 2022)), as well as **organic farming** and other systems whenever practices oriented to enhance and maintain biodiversity are implemented.

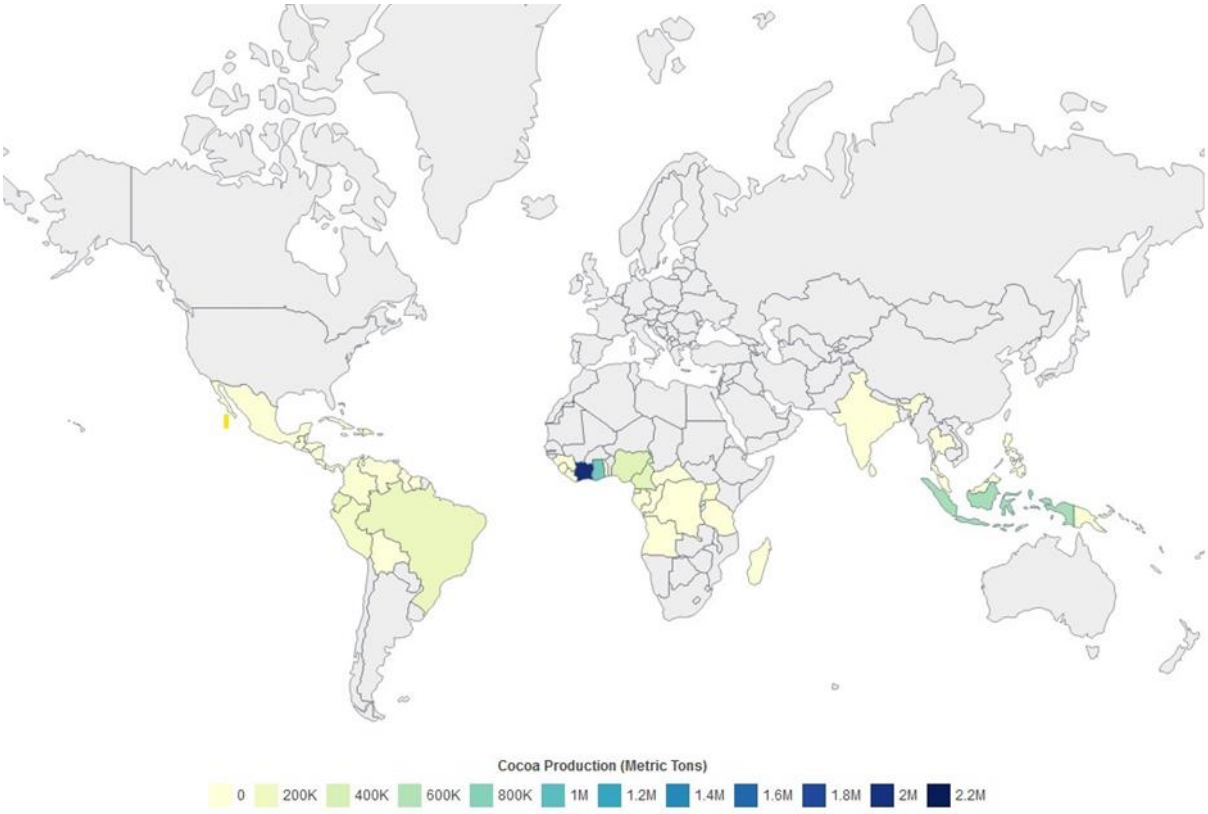
As mentioned, it should be noted that a specific, unique and well-defined classification of cultivation systems is challenging, due to the different classification perspectives (e.g. related to type of crops,

amount and type of inputs used) and the wide variety of possible combinations. For instance, it is possible to find high-input conventional monocrop plantations, but also plantations implementing intercropping and integrated pest management practices or even organic principles. By contrast, it is possible to find simple agroforestry systems, such as alley cropping relying on a discrete amount of external inputs or very complex agroforestry systems, such as home gardens, where external inputs are almost negligible.

2.2 Cocoa cultivation

Cocoa is an evergreen perennial tree that originated and naturally grows in rainforest in the inter-tropical zone in South and Central America, which started to be cultivated also in sub-Saharan Africa from the beginning of the 20th century (Amiel et al., 2019). Currently Africa is the biggest cocoa producing area (75% in 2019/20), with Ivory Coast, Ghana and Cameroon being the main producing countries (ICCO, 2022). The third biggest cocoa producer is currently Indonesia, which is quite new in the market (World Population Review, 2023). Brazil and Ecuador follow African countries and Indonesia in the list of biggest cocoa producers (ICCO, 2022). Figure 2 presents the main cocoa cultivation areas.

Figure 2. Map of cocoa production.



Source: World Population Review (2023).

Cocoa trees can grow to between 10 and 15 metres in height. A tree starts producing pods once it is three years old, reaching its maximum yield at around seven years. Harvest periods differ from country to country. For example, in Ivory Coast the large harvest is from October to March, and small or intermediate harvests occur from April to August (Amiel et al., 2019). Harvesting is a very labour intensive process because usually cocoa pods are manually harvested (ICCO 2023). This operation is generally carried out by producers, their families, and sometimes employees (Amiel et al., 2019). Cocoa pods contain several dozen beans surrounded by white pulp. Within a week or ten days after harvesting the ripened pods are opened by hand with the help of a cutting tool (e.g. machete) and

beans are manually extracted from the pod and collected in their pulp (ICCO, 2023). Sometimes the harvested pods are transported to a fermentary before splitting, although the most common practice is to group the harvested pods together and split them either in or at the edge of the plantation. The discarded husks are thus distributed throughout the field to decompose and return nutrients to the soil (Bianchi et al., 2021). There are some recent initiatives aiming at introducing some mechanisation and technologies during harvesting and pod opening, but these are at experimental level (Iyanda et al. 2018) and often not suitable for smallholders (ICCO, 2023). Worldwide, 90% of cocoa is grown by small-scale farmers (World Bank, 2022).

When trees are about 25 years old, production starts to decline (Amiel et al., 2019). At that point the grower has to choose from the following options: to maintain a farm with a severely reduced income; to replace the old trees with new ones, which entails a five year break in the harvest; to move the plantation to a new area; or to convert to another crop, such as oil palm or rubber for example, depending on world prices (Amiel et al., 2019). In agroforestry cocoa systems, such situation could be prevented by implementing several management options, for example, by planting or selecting cocoa trees in different years, allowing for a continuous cocoa trees regeneration (Somarriba et al. 2021). Furthermore, the profitability in such systems could be maintained by the sale of timber and other products cultivated simultaneously with cocoa (Somarriba et al. 2021).

Farmers grow cocoa in a variety of ways, ranging from monoculture full sun crops to agroforestry. From a tree density perspective, Ruf (2011) proposed an agro-economic classification of most cocoa cultivation systems, which identifies five main types:

- **Full-sun production**, which corresponds to a cocoa monoculture (without other trees);
- **Simple low-shade agroforestry production**, i.e. with less than ten "shade trees" (i.e. taller than cocoa trees) per hectare, with a canopy covering less than 65% of the soil (cocoa trees included). These other trees are almost always planted, usually fruit trees, and not from partially preserved natural forest;
- **Simple agroforestry production with medium shading**, with 10 to 15 trees per hectare and a canopy that covers between 65 and 85% of the soil (cocoa trees included);
- **Simple agroforestry production with high shading**, with at least 15 trees per hectare and a canopy covering more than 85% of the soil;
- **Complex agroforestry production with high shading**, with more than 50 shading trees per hectare, the complex nature of which is related to the number of vegetation layers.

Perez-Neira et al. (2020) and Perez-Neira (2016) defined the framing systems in Ecuador as including the following:

- **Conventional (technified) monoculture** with high degree of production intensity (fertilisation, irrigation, mechanical tools, improved varieties, etc.), high yield and low biodiversity;
- **Conventional agroforestry** where cocoa trees are shade-grown and there is a high degree of biodiversity (including cultivated species), the cocoa yield per hectare is low, and crop management is not intensive (little or no use of inorganic fertilization, pesticides and flood irrigation);
- **Organic agroforestry**, which is more intensively managed in terms of performance of agricultural tasks (mechanical weed control, hacking of cocoa pods, maintenance and formative pruning), application of high doses of organic fertilization, and, in some cases, implementation of more modern irrigation infrastructures, resulting in higher yields than those of conventional agroforestry farms;
- **Traditional (or peasant) agroforestry**, where cocoa coexists with dozens of other species. They have low levels of input (and capital) use and usage of traditional (national) varieties of cocoa associated with other crops;

— **Semi-intensive cultivation**, which are traditional farms that have opted for the following: (1) the introduction of improved varieties (CCN51 or improved national clones), (2) increased fertilization doses, and/or (3) technified irrigation with the purpose of increasing the yield per hectare in agroforestry system.

Full-sun cocoa farming is the most prominent cocoa cultivation method in West Africa, aiming to maximise yields in a short time (World Bank, 2022). However, according to Amiel et al. (2018), cocoa is almost exclusively produced using a simple agroforestry light-shade or medium-shade system in Ghana and Ivory Coast. In other regions, particularly South and Central America, there are complex heavy-shade agroforestry systems (e.g. home gardens). Visual examples of some of the farming systems reported above are provided in Figure 3.

Figure 3. Examples of cocoa farming typologies. From the left: full-sun monoculture (Orzoco-Aguilar and Somarriba, 2023), cocoa intercropped with afara (Terminalia superba) (World Bank, 2022) and young dynamic cocoa agroforestry system (Andres et al. 2016).

Source: Orzoco-Aguilar and Somarriba (2023); World Bank (2022); Andres et al. (2016).

2.3 Cocoa cultivation systems as modelled by LCI databases

Life Cycle Assessment (LCA) is a comprehensive, internationally standardised method for assessing and quantifying potential environmental impacts of a product or system over its whole life cycle: from production, and distribution to consumption and disposal. Some companies provide databases with inventory values of several products that can be used in the LCA. In those commercially available LCI databases, the cultivation systems usually are defined at country level and refer to the country averages. One exception is World Food LCA database (WFLDB) (Bengoa et al., 2020), which identified different cultivation systems in Africa, South and Central America, and Indonesia based on literature and information from experts working in chocolate companies. According to them, all these countries use **agroforestry**, which, according to their definition, includes an undefined proportion of original/native forest trees and other shade trees. In the modelling of agroforestry systems, they assumed that most trees have very small or no economic value at all; instead, they provide different ecosystem services, which cannot currently be taken into account in the LCA.

In **African countries** cultivation systems in WFLDB include, in addition to agroforestry:

— **Low input agriculture:** No to medium shade, many farmers use no or only small amount of fertilisers and pesticides.

— **Improved practices**: Fertiliser and pesticide volumes are applied following official recommendations, which increases the cocoa yield by approx. 150 kg/ha.

In **South and Central America and Indonesia** cultivation systems in WFLDB include, in addition to agroforestry:

— **Medium input agriculture**: Higher fertiliser amounts compared to West Africa, but also more fruit / coconut / rubber or other trees grown in between cocoa (light to medium shade), with an economic value.

— **High input agriculture:** Bigger irrigated farms, use improved planting material and 1 tonne or more of fertiliser per ha (of which 15% is nitrogen), apply mechanical pruning, and produce 2 tonnes or more cocoa beans per hectare.

Cocoa cultivation systems as included in WFLDB are different from cultivation systems identified in the agronomic literature. For example, agroforestry systems can be implemented in different ways, while WFLDB include only one type of agroforestry. Also, trees and other crops grown in agroforestry systems produce economical and diversified revenues (Niether et al., 2020), which often fully compensate the lower yields compared to monocrop cocoa systems (Armengot et al. 2016), while in WFLDB the economic value attributed to such co-products is very low. In addition, organic cultivation is not included in the WFLDB.

3 Materials and methods

This section presents the two different approaches used to evaluate the (potential) biodiversity impact due to cocoa cultivation, the Life Cycle Assessment (LCA) and the Digital Observatory for Protected Areas (DOPA).

3.1 Life Cycle Assessment (LCA) approach

3.1.1 Goal and scope of the study

The main goal of this study is to compare biodiversity impact results obtained using different biodiversity assessment methods. Cocoa cultivation is used as a case study. Biodiversity impacts are assessed for different cultivation systems in different countries in order to see differences between methods. The system boundary includes only the agricultural phase. The functional unit is 1 kg of sun-dried cocoa beans at the farm gate. Countries selected for the comparison are the main cocoa producing countries, i.e. Ivory Coast, Ghana, Cameroon, Indonesia, Brazil and Ecuador. The compared cultivation systems vary in different countries according to the practices applied in each country, including agroforestry, low, medium and high input cultivation and improved practices.

3.1.2 Biodiversity impact assessment methods

Biodiversity impacts were first assessed using two recent biodiversity methods, that use land use as only pressure, which were (i) method proposed by Chaudhary & Brooks (2018) and (ii) method proposed by Kuipers et al. (2021). The method proposed by Chaudhary & Brooks (2018) is based on the countryside species-area relationship (SAR) model to estimate potential species loss of five taxa (mammals, birds, amphibians, reptiles, plants) from five land use types (managed forests, plantations, pasture, cropland, urban) under three intensity levels (minimal, light, intense) in each of the 804 terrestrial ecoregions. Global land use intensity maps and the habitat classification scheme of the International Union for Conservation of Nature (IUCN) are used to parametrise the SAR model. The model takes uses as reference for undisturbed areas the total number of species in each ecoregion before any human intervention.

The method proposed by Kuipers et al. (2021) is based on species-habitat relationship (SHR), which is an adaptation of the SAR model, and considers both habitat conversion and fragmentation effects. Characterisation factors are developed for 702 terrestrial ecoregions for four land use types (forestry, pasture, cropland, urban), and for four taxonomic groups (mammals, birds, amphibians, reptiles). Land use and land cover data in each ecoregion are based on the GLOBIO 2015 land use map (Schipper et al., 2020). The reference land cover map indicates the land cover absent of human land use.

In addition to the recent land use-based methods, the biodiversity impacts were assessed using also already operational LCA methods, which can be found in the SimaPro 9.4 software (Pré Sustainability, 2023). These LCIA methods consider wider number of pressures, e.g. water use, climate change, nutrients, and toxic emissions. The methods used are ReCiPe 2016 (Huijbregts et al., 2016), LC-Impact (Verones et al., 2016, 2020) and Impact World+ (Bulle et al., 2019). Each method has individual models for each impact category (or pressure), which are then converted into biodiversity impacts as explained in the documentation of each method and in Damiani et al. (2023). These methods were used as applied in the SimaPro 9.4 software, without any modifications. ReCiPe 2016 assesses biodiversity impact as species loss, while LC-Impact and Impact World+ assess potentially disappeared fraction of species (PDF).

3.1.3 Life cycle inventory data

The Life Cycle Inventory (LCI) data for impact assessment was searched from available LCI databases and literature. Only one LCI database (WFLDB (Bengoa et al., 2020)) was found to provide information on different cultivation systems within different countries, while all other databases provide information only for country averages. In addition, the literature provides data on some countries and

cultivation systems. However, using many different data sources in the assessment was estimated to weaken the comparability of the results between countries and cultivation systems. For this reason, only WFLDB (Bengoa et al., 2020) was selected as a data source. Cocoa yields in different countries with different cultivation systems (Bengoa et al., 2020), land occupation (I.e. actual land occupied by cocoa plant) and land transformation WFLDB (I.e. area transformed from other purposes to cultivate cocoa) calculated from the yield data are presented in Table 2.

Table 2. Cocoa yields, land occupation (area needed to produce one kg of cocoa) and land transformation (area transformed for cocoa cultivation to produce one kg of cocoa) data used in the assessment.

Country	Cultivation practice	Yield, kg/ha	Occupation, m^2/kg	Transformation, m^2/kg
Ivory Coast	Agroforestry	450	18.4	0.51
	Low input	500	17.9	0.46
	Improved	650	12.5	0.35
Ghana	Agroforestry	550	15.8	0.35
	Low input	600	15.3	0.32
	Improved	750	11.3	0.26
Cameroon	Agroforestry	400	21.2	0.61
	Low input	450	20.2	0.54
	Improved	600	14.0	0.41
Indonesia	Agroforestry	450	17.9	0.86
	Medium input	650	13.2	0.60
	High input	1500	6.4	0.26
Brazil	Agroforestry	450	17.9	0.00
	Medium input	800	11.0	0.00
	High input	2000	4.8	0.00
Ecuador	Agroforestry	450	17.9	0.26
	Medium input	800	11.0	0.15
	High input	2500	3.9	0.05

Source: Bengoa et al. (2020).

3.1.4 Mapping of cultivation systems and land use flows in the methods

In order to assess potential biodiversity impacts of different cultivation systems, each cultivation system had to be mapped with the land use types included in the methods used in this study. Table 3 presents the mapping between the cultivation systems included in the WFLDB database and land use types included in the methods. It should be noted that none of the methods considered include agroforestry as land use type. In fact, Kuipers et al. (2021) method includes only one type of cropland

and forestry without further specification, thus forestry was selected to represent agroforestry and cropland for all other cultivation systems. In the case of Chaudhary & Brooks (2018) method, there were more variability in the land use types. However, also in this case agroforestry was not among them, and it was difficult to select the most representative land use type. For this reason, two different options were compared: 1) plantation forestry with minimal use, and 2) managed forest with light use. For other cultivation systems, cropland with different intensity levels were selected, as presented in Table 3.

Characterisation factors (CF) for each country and cultivation method were retrieved from the documentation of the methods according to the mapping presented in Table 3, e.g. for low input agriculture cropland with minimal use (Chaudhary & Brooks, 2018 method) or cropland (Kuipers et al., 2021 method) was selected as a land use type. Land occupation CFs express Potentially Disappeared Fraction (PDF) of species per m^2, and land transformation PDF per year per m^2. All CFs used in this study are presented in Annex 1. In Kuipers et al. (2021) method, Cameroon has the highest CFs for both land occupation and transformation, followed by Indonesia, while in Chaudhary & Brooks (2018) method Ecuador has the highest CFs followed by Indonesia. When comparing CFs of different cultivation systems within one country, it can be noticed that the agroforestry has the highest CF in African countries, while in Indonesia, Brazil and Ecuador the cropland has the highest impact in Kuipers et al. (2021) method, for both in land occupation and land transformation. Also in Chaudhary & Brooks (2018) method the CF is highest for agroforestry in African countries and Indonesia when plantation forestry was selected to represent agroforestry. When selecting managed forest with light use, agroforestry has second highest CF in Ivory Coast and Ghana, and lowest in other countries.

Table 3. Mapping of cultivation systems for which LCI data is available with cultivation systems for which characterisation factors are available.

Cultivation systems in LCI data (Bengoa et al., 2020)	**Cultivation systems in biodiversity methods**	
	Chaudhary & Brooks (2018)	**Kuipers et al. (2021)**
Agroforestry (all countries): Undefined proportion of the shade trees are original/native forest trees and other shade trees. Most trees do not have an economic value; they rather provide different ecosystem services.	**Plantation forestry with minimal use:** Extensively managed or mixed timber plantations in which native understorey and/or other native tree species are tolerated, which are not treated with pesticide or fertiliser, and which have not been recently (< 20 years) clear-felled.	**Forestry**
	Managed forest with light use: Forests where only selected commercially valuable trees are harvested at a time such that the disturbance is not enough to markedly change the nature of ecosystem.	
Low input agriculture (Africa): No to medium shade, many farmers use no or only little fertilisers and pesticides.	**Cropland, minimal use:** Low-intensity farms, typically with small fields, mixed crops, crop rotation, little or no inorganic fertiliser use, little or no pesticide use, little or no ploughing, little or no irrigation, little or no mechanisation.	**Cropland**
Medium input agriculture (South America & Indonesia): Higher fertiliser amounts compared to West Africa, but also grow more fruit / coconut / rubber or other trees in between cocoa (light to medium shade), with an economic value.	**Cropland, light use:** Medium intensity farming, typically showing some but not many of the following: large fields, annual ploughing, inorganic fertiliser application, pesticide application, irrigation, no crop rotation, mechanisation, monoculture crop. Organic farms in developed countries often fall within this category, as may high-intensity farming in developing countries.	
Improved practices (compared to low input agriculture, Africa): Fertiliser and pesticide volumes applied are following official recommendations, which increases the cocoa yield by approx. 150 kg/ha.	**Cropland, light use:** Medium intensity farming, typically showing some but not many of the following: large fields, annual ploughing, inorganic fertiliser application, pesticide application, irrigation, no crop rotation, mechanisation, monoculture crop. Organic farms in developed countries often fall within this category, as may high-intensity farming in developing countries.	
High input agriculture (South America & Indonesia): Bigger irrigated farms, use improved planting material and 1 tonne or more of fertiliser per ha, apply mechanical pruning, and produce 2 tonnes or more cocoa beans per hectare.	**Cropland, intense use:** High-intensity monoculture farming, typically showing many of the following features: large fields, annual ploughing, inorganic fertiliser application, pesticide application, irrigation, mechanisation, no crop rotation.	

Source: Bengoa et al. (2020); Chaudhary & Brooks (2018); Kuipers et al. (2021).

3.1.5 Biodiversity impact at country level

Cocoa production amount varies between countries. Therefore, to assess biodiversity impact due to cocoa cultivation per country and to compare biodiversity impacts due to cocoa cultivation between countries, the total results (impacts due to both land occupation and land transformation) were multiplied by national cocoa production amounts for the season 2019/2020 (Table 4). Due to lack of data, it was not possible to take into account shares of different cultivation systems within each country. Therefore, results are presented assuming 100% share of each cultivation system at the time.

Table 4. Cocoa production amounts for the season 2019/2020 (thousand tonnes).

Country	**Cocoa production (1000 t)**
Ivory Coast	2105
Ghana	771
Cameroon	280
Indonesia	200
Brazil	201
Ecuador	342

Source: ICCO (2022).

3.2 The Digital Observatory for Protected Areas (DOPA) approach

The Digital Observatory for Protected Areas (DOPA) is a set of web services and applications that can be used primarily to assess the state of and the pressure on biodiversity and ecosystem services at multiple scales (protected area, country and ecoregion). It notably processes and uses IUCN Red List datasets to calculate multiple indicators such as the number of species facing a certain threat in a certain country. Here, we used this DOPA functionality to calculate the number of species facing the threat "annual and perennial non-timber crops" for each of the main cocoa producing countries, i.e. Ivory Coast, Ghana, Cameroon, Indonesia, Brazil and Ecuador, based on the version 2022-1 of the IUCN Red List (IUCN, 2022). According to the IUCN working document on classification of threats[8], this category encompasses threats from farming and ranching as a result of agricultural expansion and intensification for crops planted for food, fodder, fibre, fuel, or other uses. Therefore, although it includes threats from cocoa plantations, it also includes threats from other annual and perennial non-timber crops. Because we looked at species threatened by annual and perennial non-timber crops in countries where cocoa is a dominant crop, such species correspond to those that are the most likely to be threatened by cocoa cultivation, but this remains an approximation. For this reason, in the rest of this report, we refer to species figures derived from this DOPA functionality as "***potential*** biodiversity impacts due to cocoa cultivation".

Specifically, by combining the IUCN information on species regarding the threats they face and the countries where they are present, for each country, the number of mammal, amphibian and bird species as well as the total number of species over these three taxonomic groups (i.e. mammals + amphibians + birds) threatened by annual and perennial non-timber crops was calculated. These figures were also converted in percentage terms, as the share of species threatened by annual and

[8] https://nc.iucnredlist.org/redlist/content/attachment_files/Dec_2022_Guidance_Threats_Classification_Scheme.pdf

perennial non-timber crops out of the total number of species in the country for mammals, amphibians and birds as well as for the total number of species over these three taxonomic groups (i.e. mammals + amphibians + birds).

4 Results

This section presents the results of the biodiversity impact analysis due to cocoa cultivation in different countries and in different cultivation systems using Life Cycle Assessment methods (Section 4.1), and the potential biodiversity impacts due to cocoa cultivation using information on species threats available in the Digital Observatory for Protected Areas (Section 4.2). Ranking of countries in terms of (potential) biodiversity impacts is compared between these two types of approaches in Section 4.3.

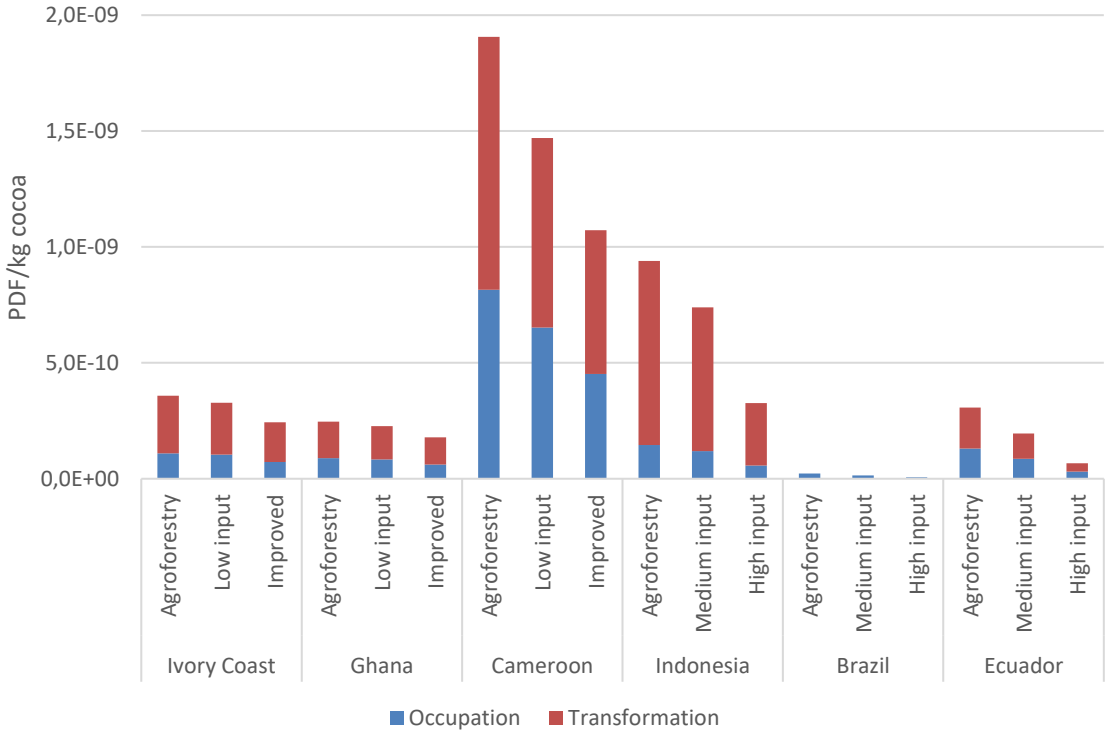
4.1 Biodiversity impacts evaluated with LCA methods

Biodiversity impacts evaluated with Life Cycle Assessment methods are presented using recent methods focusing only on land use pressure (Section 4.1.1). Section 4.1.2 presents the comparison of biodiversity impact obtained with land use methods with the biodiversity impact obtained with operational LCIA methods, which consider a wider number of pressures.

4.1.1 Biodiversity impact with land use methods

When comparing biodiversity impact due to cocoa cultivation across different cultivation systems per kg cocoa, it was found that impacts calculated with the method of Kuipers et al. (2021) are always the highest for agroforestry, whatever the country considered (Figure 4). On the opposite, the lowest impact is observed with improved cultivation in African countries, and with high input cultivation in other countries, although the land occupation and land transformation CFs of cropland are higher than those of forestry in Indonesia, Brazil and Ghana (Annex 1). This is because the yield is higher in improved and high input cultivation systems compared to agroforestry, which leads to lower land area needed per kg of cocoa, and thus lower biodiversity impact. Most of the biodiversity impacts are due to land transformation, except in Brazil where land transformation is zero according to the datasets used.

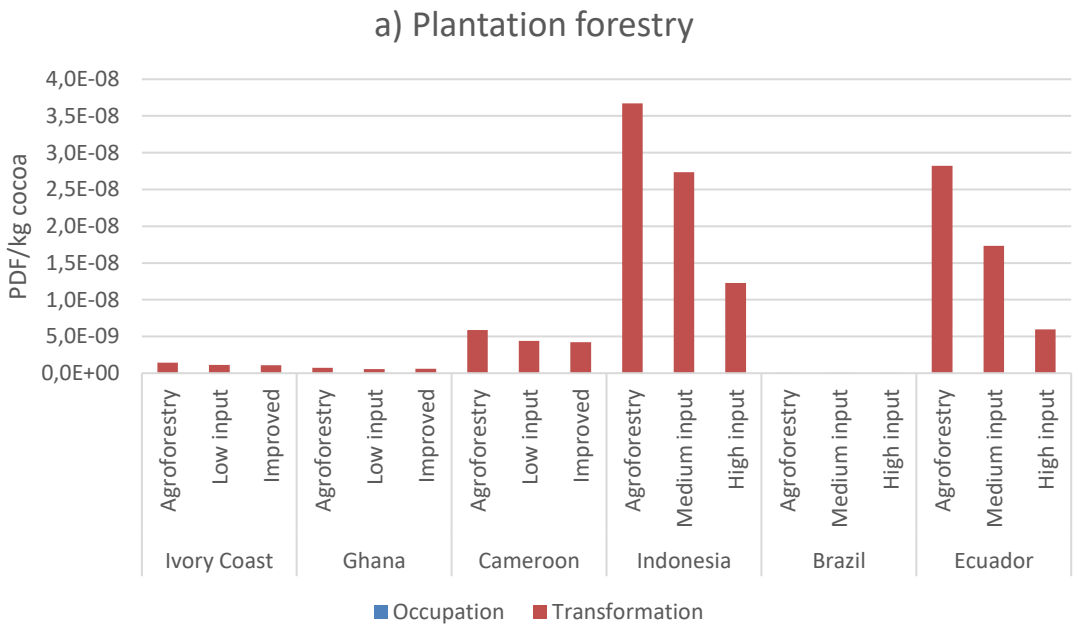
Figure 4. Biodiversity impact (per kg of cocoa) due to cocoa cultivation across different cultivation systems with the method of Kuipers et al. (2021).

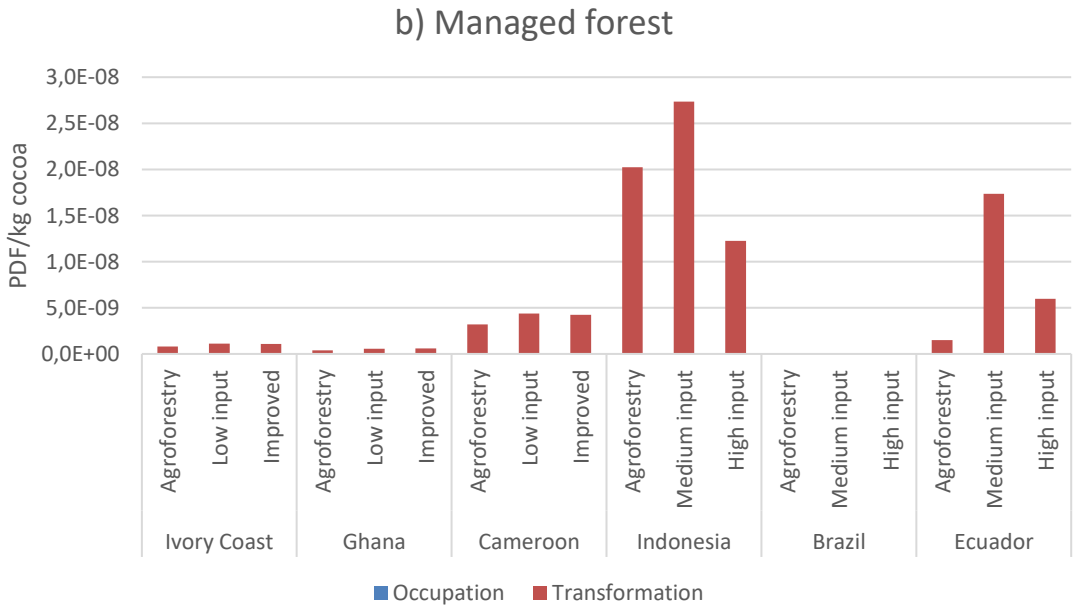


Source: Own elaboration.

The same results are observed when biodiversity impact due to cocoa cultivation is evaluated with the method of Chaudhary & Brooks (2018), when plantation forestry CFs are used for agroforestry: agroforestry has the highest biodiversity impact in all countries (Figure 5a), although the land occupation and land transformation CFs in Brazil and Ecuador are lowest for agroforestry (Annex 1). However, the picture changes when managed forest CFs are used for agroforestry: in such case, the cultivation systems having the highest biodiversity impact are low input in African countries and medium input for Indonesia and Ecuador. Agroforestry remains the cultivation system with the highest biodiversity impact only in Brazil although the impacts are very low compared to other countries (Figure 5b).

Figure 5. Biodiversity impact (per kg of cocoa) due to cocoa cultivation across different cultivation systems with the method of Chaudhary & Brooks (2018), using for agroforestry either a) plantation forestry with minimal use, or b) managed forest with light use.



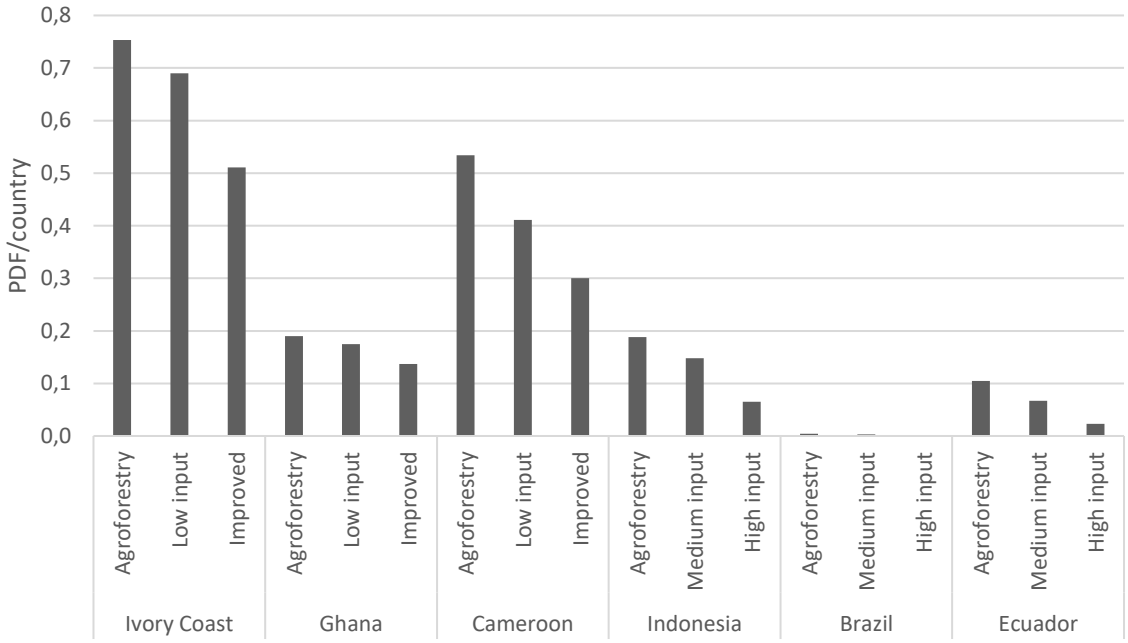


Source: Own elaboration.

When comparing biodiversity impact due to cocoa cultivation across different countries with the method of Kuipers et al. (2021), the highest biodiversity impact is observed in Cameroon whatever the cultivation system considered, due to both land occupation and transformation (Figure 2). This is because the CFs for Cameroon are the highest, and cocoa yield is the lowest compared to other countries, thus the land needed for producing 1kg of cocoa is the highest. On the contrary, Brazil shows the lowest biodiversity impact because land transformation for cocoa cultivation is zero according to the dataset used (see Table 2) and CFs are the lowest for Brazil (Annex 1). These results change when the method of Chaudhary & Brooks (2018) is used: in such case, the highest biodiversity impact is observed in Indonesia (agroforestry and medium input cultivation systems), although CFs are higher for Ecuador (Annex 1). Brazil still shows the lowest biodiversity impact also in Chaudhary & Brooks (2018) method (Figure 5), Ghana and Ivory Coast having only slightly higher impact.

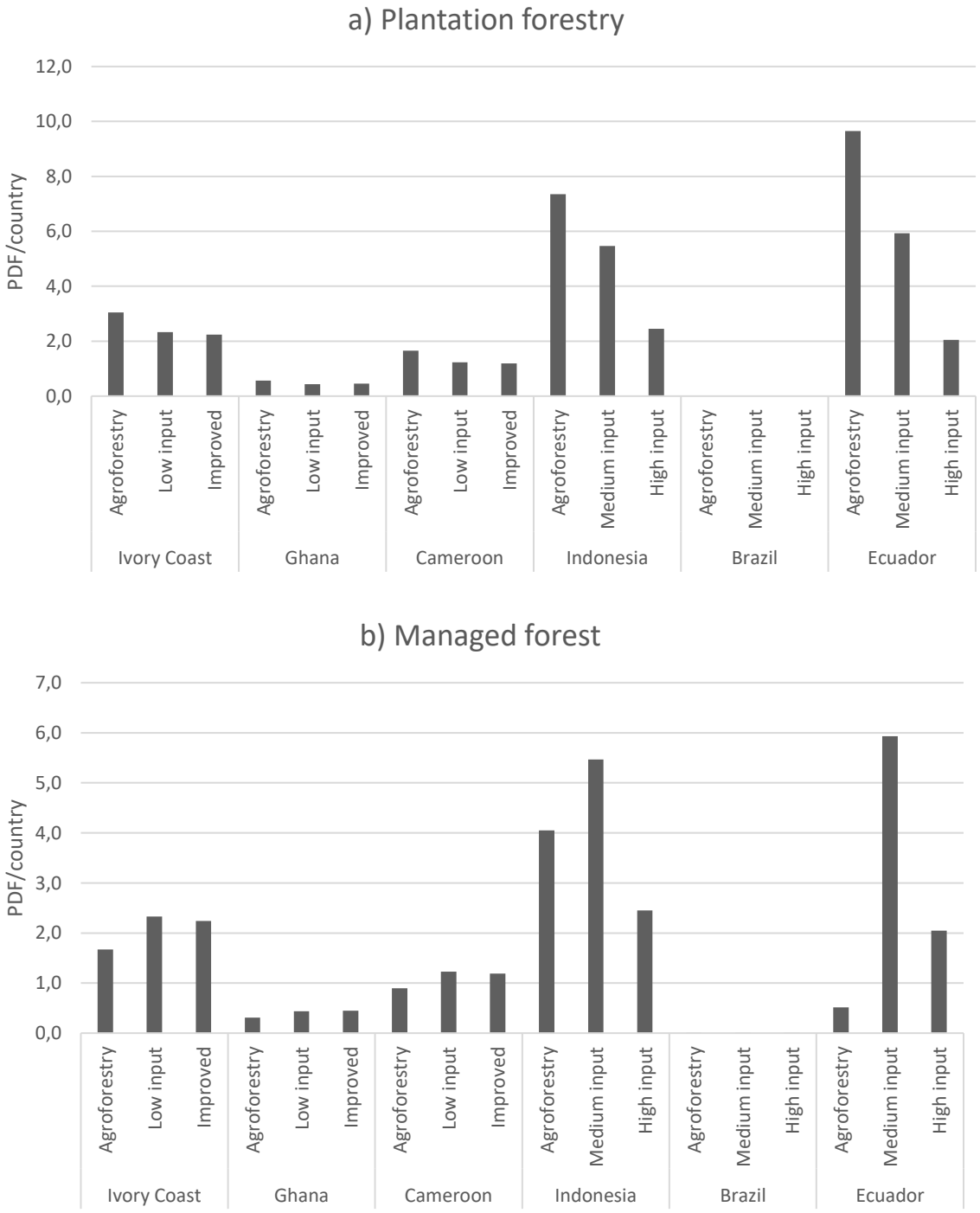
When assessing the biodiversity impact at country level, with the method of Kuipers et al. (2021), the highest biodiversity impact per country is observed for Ivory Coast, if all cocoa would be produced using agroforestry or low input system (Figure 6) This is because cocoa production amount is much higher in Ivory Coast compared to other countries, including Cameroon (Table 4), which shows the highest impact per kg of cocoa produced (Figure 4) as highlighted in the previous section. On the opposite, the lowest biodiversity impact per country is observed for Brazil, no matter which cultivation system is applied (Figure 6), which is also the country showing the lowest impact per kg of cocoa produced (Figure 4). These results change when the method of Chaudhary & Brooks (2018) is used: in this case, the highest biodiversity impact is observed either in Indonesia or in Ecuador (depending on the cultivation system and the CFs used for agroforestry), but Brazil still shows the lowest biodiversity impact (Figure 7).

Figure 6. Biodiversity impact (per country) due to cocoa cultivation across different cultivation systems, calculated with the method of Kuipers et al. (2021). Note that biodiversity impact calculated for Brazil is so low that it is not visible in the figure.



Source: Own elaboration.

Figure 7. Biodiversity impact (per country) due to cocoa cultivation across different cultivation systems calculated with the method of Chaudhary & Brooks (2018), using for agroforestry either a) plantation forestry with minimal use, or b) managed forest with light use. Note that biodiversity impact in Brazil is so low that it is not visible in the figures.



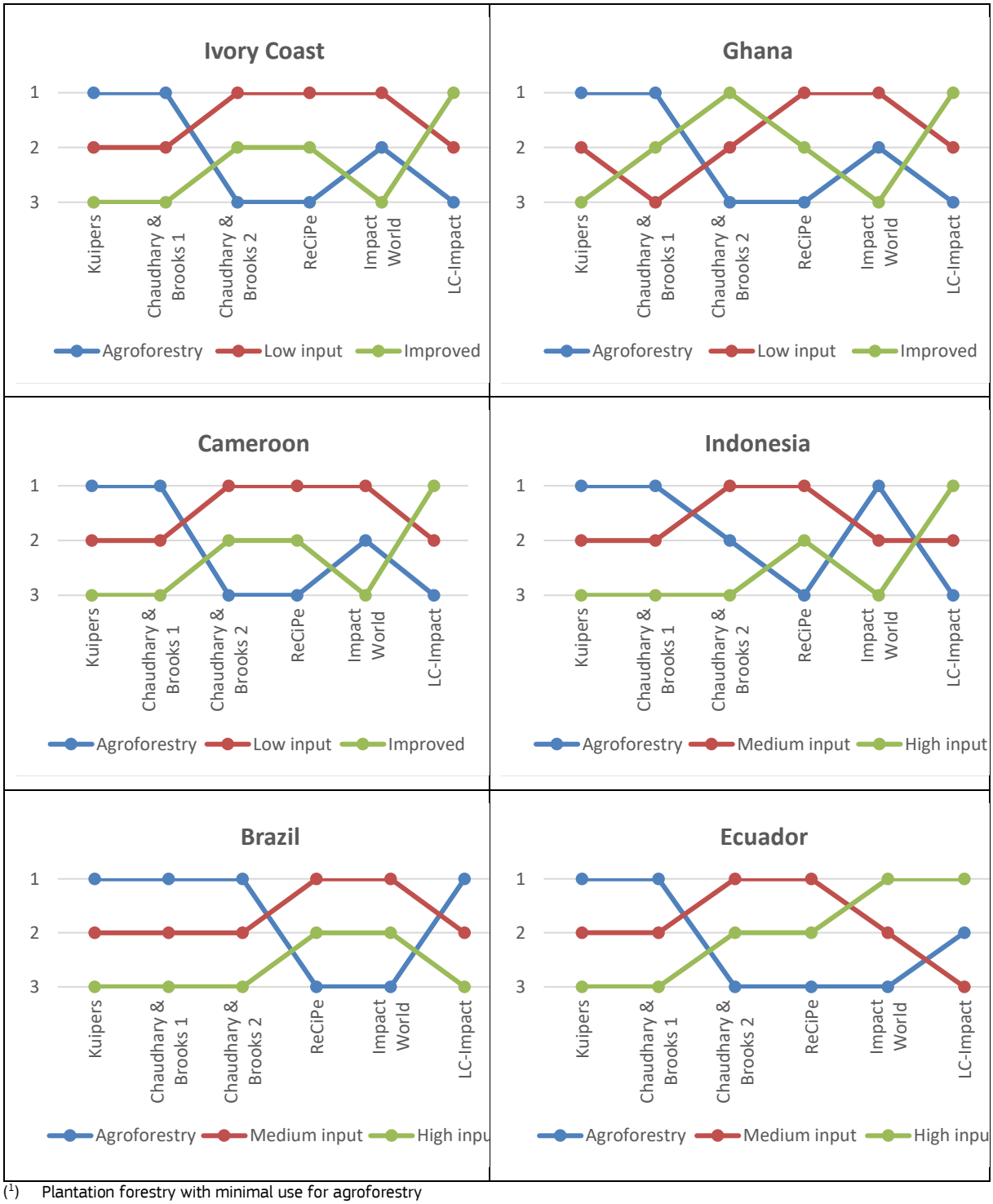
Source: Own elaboration.

4.1.2 Biodiversity impact with operational LCIA methods

When assessing biodiversity impact including also other pressures, in addition to land occupation and transformation, it can be noticed that cocoa cultivated in agroforestry has the highest impact only in a few cases, i.e. in Indonesia with Impact World+, and in Brazil with LC-Impact (Figure 8). In addition, cocoa cultivated in agroforestry has the lowest impact in all countries with ReCiPe 2016 method. In contrast, with the land use methods cocoa cultivated in agroforestry has always the highest impact

according to the Kuipers et al. (2021) method and when plantation forestry is selected as land use type in Chaudhary & Brooks (2018).

Figure 8. Ranking of biodiversity impact of cocoa cultivation systems in each included country per one kg of cocoa cultivated. Number 3 represents the lowest impact and number 1 the highest.



(1) Plantation forestry with minimal use for agroforestry
(2) Managed forest with light use for agroforestry

Source: Own elaboration.

Results are also different when comparing country rankings (Table 5). Land use based methods rank Cameroon and Indonesia (Kuipers et al., 2021) or Indonesia and Ecuador (Chaudhary & Brooks, 2018) as countries with the highest biodiversity impacts and Brazil as the country with the lowest biodiversity impact, no matter of the cultivation system applied in the country. In contrast, LC-Impact ranks Brazil as the country with the second highest biodiversity impact after Ecuador. Impact World+ ranks Indonesia as the country with the highest biodiversity impact, being in line with land use methods, but ranks Ivory Coast as the country with the second highest impact, although it is not ranked among the highest impacts with land use methods per kg cocoa. With Recipe 2016 method there is no single country that always has higher impact compared to others, but there is clear difference with the cultivation system applied, i.e. agroforestry has the lowest impact throughout the countries per kg of cocoa produced. Note that values between methods are not comparable because of different units and scale of methods (e.g. global vs. local).

Table 5. Biodiversity impacts in different countries with different methods. The red colour refers to the cultivation system with the highest impact in the specific method in each country, the dark green colour to the lowest impact, and the yellow to the impacts in between.

Country	Cultivation system	Kuipers et al. (2021) (PDF*year/kg cocoa)	Chaudhary & Brooks (2018)[1)] (PDF*year/kg cocoa)	Chaudhary & Brooks (2018)[2)] (PDF*year/kg cocoa)	ReCiPe 2016 (species*year/kg cocoa)	Impact World+ (PDF*m2*year/kg cocoa)	LC-Impact (PDF*year/kg cocoa)
Ivory Coast	Agroforestry	3.58E-10	1.45E-09	7.92E-10	1.54E-01	3.55E+01	-6.85E-14
	Low input	3.28E-10	1.10E-09	1.10E-09	1.90E+02	3.59E+01	-5.95E-14
	Improved	2.43E-10	1.06E-09	1.06E-09	1.35E+02	2.66E+01	-4.01E-14
Ghana	Agroforestry	2.47E-10	7.36E-10	4.02E-10	9.00E-02	1.27E+01	-7.35E-14
	Low input	2.27E-10	5.68E-10	5.68E-10	1.22E+02	1.35E+01	-6.53E-14
	Improved	1.78E-10	5.84E-10	5.84E-10	9.14E+01	1.15E+01	-4.71E-14
Cameroon	Agroforestry	1.91E-09	5.88E-09	3.20E-09	1.32E-01	2.70E+01	-7.31E-14
	Low input	1.47E-09	4.39E-09	4.39E-09	1.71E+02	2.73E+01	-6.17E-14
	Improved	1.07E-09	4.23E-09	4.23E-09	1.20E+02	2.19E+01	-4.13E-14
Indonesia	Agroforestry	9.39E-10	3.67E-08	2.02E-08	2.13E-01	4.72E+01	-1.23E-13
	Medium input	7.40E-10	2.74E-08	2.74E-08	1.89E+02	3.73E+01	-8.27E-14
	High input	3.27E-10	1.23E-08	1.23E-08	9.56E+01	1.99E+01	-2.65E-14
Brazil	Agroforestry	2.25E-11	4.19E-12	3.81E-12	3.08E-02	3.08E+00	2.48E-14
	Medium input	1.40E-11	2.67E-12	2.67E-12	4.93E+01	4.72E+00	2.48E-14
	High input	6.10E-12	1.17E-12	1.17E-12	2.58E+01	3.66E+00	1.56E-14
Ecuador	Agroforestry	3.08E-10	2.82E-08	1.50E-09	3.17E-02	-2.20E+01	4.04E-14
	Medium input	1.95E-10	1.73E-08	1.73E-08	4.99E+01	-1.07E+01	3.44E-14
	High input	6.70E-11	5.98E-09	5.98E-09	2.15E+01	-2.47E+00	5.52E-14

(1) Plantation forestry with minimal use for agroforestry
(2) Managed forest with light use for agroforestry

Source: Own elaboration.

4.2 Potential biodiversity impacts per country revealed by the DOPA approach

The potential biodiversity impacts due to cocoa cultivation expressed as the number of species threatened by annual and perennial non-timber crops in Ivory Coast, Ghana, Cameroon, Indonesia, Brazil and Ecuador are presented in Table 6. When all taxonomic groups are considered together, among the six countries, Indonesia is the one with the most species threatened by annual and perennial non-timber crops, and Ghana with the least. This also holds true when considering only mammals. However, for amphibians, the pattern is different: Ecuador becomes the country with the most amphibian species threatened by annual and perennial non-timber crops, and Ghana remains the country with the least. For birds, Indonesia is the country with the most bird species threatened by annual and non-perennial timber crops, and Ghana remains the country with the least.

Table 6. Number of species threatened by annual and perennial non-timber crops.

	Total	**Mammals**	**Amphibians**	**Birds**
Ivory Coast	205	82	48	75
Ghana	178	68	40	70
Cameroon	317	111	121	85
Indonesia	858	329	159	370
Brazil	671	167	273	231
Ecuador	562	93	304	165

Source: Own elaboration.

When looking at the potential biodiversity impact due to cocoa cultivation expressed at the percentage of species threatened by annual and perennial non-timber crops (Table 7), Indonesia remains the country the most impacted when all taxonomic groups are considered together, but Ivory Coast is the least impacted. The same holds true when considering mammals only. Indonesia remains the most impacted country when considering birds only, but Ecuador is the most impacted country when considering amphibians only. Overall, the percentage of species threatened by annual and perennial non-timber crops is much higher for amphibians than for mammals and birds, except in Indonesia where the percentage of species threatened by annual and perennial non-timber crops is higher for mammals than for amphibians.

Table 7. Percentage of species threatened by annual and perennial non-timber crops out of the total number of species present in the country.

	Total	Mammals	Amphibians	Birds
Ivory Coast	13.5	10.8	52.2	11.2
Ghana	17.7	27.3	50	10.5
Cameroon	22.1	33.2	56	9.6
Indonesia	30.2	46.1	38.5	21.5
Brazil	20.3	24.4	33.3	12.8
Ecuador	22.7	23.6	63.9	10.2

Source: Own elaboration.

4.3 Comparison of LCA and DOPA results

In this section, country rankings in terms of (potential) biodiversity impacts due to cocoa cultivation are compared by confronting:

- the LCA results at country level in terms of PDF by country using land used based methods only, based on the agroforestry cultivation system (as this is the only cultivation system used in all countries), that takes into account pressures related to land occupation and land transformation;
- the DOPA results at country level in terms of percentage of species threatened by annual and perennial non-timber crops (including but not limited to cocoa) out of the total number of species present in the country, that is a measure of threat not specifically related to any pressure.

The methods differ in various respects, and namely:

- the **taxa** covered: mammals, birds and amphibians for both DOPA and LCA; some LCA methods also consider reptiles and plants;
- **pressures**: land occupation and transformation for the two LCA methods, no specific pressure for DOPA;
- **approaches**: model based in LCA versus individual species assessment with the DOPA;
- considered **crops**, since the DOPA approach embraces annual and perennial non-timber beyond cocoa.

However, the comparison is intended to check whether there is any consistent emerging pattern in country ranking in terms of biodiversity impact due to cocoa cultivation despite the methodological divergences in assessing it. As the DOPA approach makes no difference between cultivation systems, the LCA results used here for comparison are those based on the agroforestry cultivation system, which is the only cultivation system applied in all included countries. The DOPA results used for comparison are those on the percentage of species (mammals, amphibians and birds) threatened by annual and perennial non-timber crops.

As illustrated in Table 8, and despite some variability in terms of country ranking, the different LCA methods converge in:

- ranking Ivory Coast in the top 3 of countries with the highest impact, with an impact always higher than Ghana;
- ranking Brazil as the country with the lowest impact.

Table 8. Country ranking in terms of (potential) biodiversity impact due to cocoa cultivation according to different approaches. Number one represents the country with the highest (potential) biodiversity impact and number 6 the country with the lowest.

	Kuipers et al. (2021)	**Chaudhary & Brooke (2018) - plantation forestry**	**Chaudhary & Brooke (2018) - managed forest**	**DOPA - percentage**
Ivory Coast	1	3	2	6
Ghana	3	5	5	5
Cameroon	2	4	3	3
Indonesia	4	2	1	1
Brazil	6	6	6	4
Ecuador	5	1	4	2

Source: Own elaboration.

The DOPA approach shows different results as:

- it ranks Ivory Coast as the country with the lowest impact, and Indonesia as the country with the highest impact (in agreement with the LCA method of Chaudhary & Brooks (2018) using managed forest);
- it ranks Brazil as intermediate in terms of potential impact, with a potential impact higher than both Ivory Coast and Ghana.

Therefore, overall, patterns of country ranking in terms of (potential) biodiversity impacts due to cocoa cultivation differ between LCA and DOPA approaches.

5 Discussion

Overall, the results of this study indicate that:

- when analysed with LCA based methods, agroforestry turns out to be the cultivation system with the highest biodiversity impact per kg of cocoa produced, and
- patterns of country ranking in terms of (potential) biodiversity impacts due to cocoa cultivation differ between LCA and DOPA approaches.

Section 5.1 focuses on confronting the first finding (that agroforestry is the cultivation system with the highest biodiversity impact per kg of cocoa produced) with the literature, and then explores whether this remains valid when LCA methods taking into account further pressures are used. Section 5.2 highlights how the DOPA approach, beyond its use for comparability with the LCA approach, can complement LCA methods in understanding and communicating the impacts of cocoa cultivation on biodiversity. Finally, the limits of both LCA and DOPA approaches in assessing the impacts of cocoa cultivation on biodiversity and the perspectives to overcome them are discussed in section 5.3.

5.1 Is agroforestry really the cultivation system with the highest biodiversity impact for cocoa production?

According to many literature studies, **agroforestry has less impact on biodiversity than other cocoa cultivation systems.** In their meta-analysis comparing cocoa agroforestry systems with cocoa monocultures, Niether et al. (2020) found that cocoa agroforestry systems show a significantly higher number of animal species than cocoa monocultures. In another meta-analysis focusing on birds, Bennet et al. (2021) highlighted that bird diversity declines sharply in low shade cocoa. They also found that cocoa with >30% canopy cover from diverse trees has a similar number of species compared to nearby primary or mature secondary forest, but holds a different community of birds. Maney et al. (2022), on the other hand, modelled biodiversity responses to land use due to cocoa cultivation. They included agroforestry systems established under natural shade and those grown in open land, intensive cultivation in cropland (including monoculture), and primary and secondary forests. Maney et al (2022) concluded that species richness in cocoa agroforestry systems are lower than primary forests, but higher than in open land systems. These recent studies are consistent with the conclusions of Amiel et al. (2019) stating that the few available studies on the link between cocoa production systems and biodiversity confirm the view that biodiversity is greater (or less impacted) the higher the number and diversity of trees of forest origin present alongside the cocoa trees. This view is, however, usually based on the presence of macrofauna, less commonly on flora and soil conditions, and does not consider the relative impacts of fertilizer and pesticide use as well as their potential impact on downstream watersheds.

Moreover, some non-LCA studies indicate that the impact of cocoa cultivation on biodiversity is lower when cocoa cultivation systems are more extensive. For instance, Bisseleua et al. (2008) assessed plant biodiversity and vegetation structure in traditional cocoa forest gardens under different management regimes in southern Cameroon. They observed that plant species numbers were decreasing when moving from extensive cultivation to more intensive one.

All these findings from literature apparently **contradict the finding of this study, based on two LCA methods** considering land use occupation and transformation as pressures, **that agroforestry has a higher biodiversity impact per kg of cocoa produced than more intensive cultivation systems**. Such apparent contradiction actually reflects the debate about land sharing versus land sparing (see Baudron et al., 2021 for a recent perspective): when it comes to combine agricultural production with biodiversity conservation, is it better to spare land for biodiversity outside farms (minimizing demand for farmland by increasing yield), or share land between biodiversity conservation and agricultural production objectives (boosting densities of wild populations on farmland but decreasing agricultural yields)? Such apparent contradiction may have at least **two explanations**, which are described below.

The first one is the **unit of measurement**. Most of the literature studies mentioned above evaluate the impact of different cocoa cultivation systems on biodiversity by comparing biodiversity between systems per se, while LCA approaches assess biodiversity impact of different cocoa cultivation systems per kg of cocoa produced. The unit of comparison is therefore different: in the first case, the unit of comparison is the cocoa plantation, while in the second case it is the kg of cocoa produced. In the LCA approaches, according to datasets used, agroforestry requires more land to produce one kg of cocoa than the other cultivation systems[9]. Since the two LCA methods used in this study are based on land occupation and transformation pressures only, agroforestry shows the highest impact on biodiversity per kg of cocoa produced.

The second one is the **number and types of pressures** considered. Most of the literature studies mentioned above are based on field observations, meaning that the impact on biodiversity observed may result from any pressures happening physically in the cocoa plantations, while the two LCA methods we use model biodiversity impact due to pressures of land occupation and transformation only. The apparent contradiction between findings from literature and finding of this study may therefore result from difference in methods to assess biodiversity impact (observation versus modelling) and the scope of pressures taken into account (all pressures occurring physically in the cocoa plantations versus land occupation and transformation only). In fact, when using operational LCIA methods including more pressures (e.g. climate change, water use, ecotoxicity), it was noticed that agroforestry does not anymore have the highest impact.

5.2 The DOPA approach can complement LCA methods in understanding and communicating the impacts of cocoa cultivation on biodiversity

The DOPA approach was here primarily used to assess whether it can help interpret LCA results, e.g. by comparing if countries rank the same in terms of (potential) biodiversity impact due to cocoa cultivation when looking at the number of species threatened by annual and perennial non-timber crops by country (DOPA approach) and the potential disappearing fraction of species by country (LCA approach). However, the DOPA approach does not only provide the number of species threatened by annual and perennial non-timber crops, but also their identity, whether they are endemic to one country or not, and how much they are threatened (Annex 2).

Such findings can be more concrete than a number of species to understand and communicate the potential impacts of cocoa cultivation on biodiversity. For instance, looking at the potential biodiversity impacts due to cocoa cultivation in Indonesia with the DOPA approach, not only it reveals that 858 species are potentially impacted, but also that it comprises 402 species that are only present in Indonesia, including 27 that are critically endangered such as the Celebes crested macaque (Figure 10). Such information on which species are potentially impacted by cocoa cultivation can help to design species-specific conservation actions to counterbalance the negative effects of cocoa cultivation on the species, and can also be used to communicate the potential impacts of cocoa on biodiversity to the general public in a more immediate and effective way. However, this can only be done effectively if, from the list of species potentially impacted species by cocoa cultivation, we can disentangle those which are actually impacted by cocoa cultivation from those impacted by other annual and perennial non-timber crops. Two ways forward can be proposed to that end. First, the textual descriptive information on threats associated to the species threatened by annual and perennial non-timber crops available through the IUCN Red List could be further exploited by text mining to look for “cocoa” occurrences. It has been done to provide an estimate of the number of species threatened by oil palm plantations (Meijaard et al., 2020), although the authors recognise that this approach underestimates the actual number of species threatened by oil palm plantations

[9] Lower yield of main crop (in this case cocoa) can be because of the cultivation of other crops in the same area. This is taken into account by allocating inputs and finally impacts between main crop and other crops. In case of agroforestry, the majority of the impacts are allocated for cocoa (80%-87%, depending on the country (Bengoa et al., 2020)).

(and it would be the same for cocoa). The second option would be to compare the distribution of species to the distribution of cocoa plantations to show which species are exposed to cocoa plantations. However, this would require a map of cocoa plantations for all the countries of interest, while it currently exists only for Ivory Coast and Cameroon (Abu et al., 2021), and this would only show exposure of species instead of actual impact.

Figure 9. Photo of a Celebes crested macaque, an endemic species to Indonesia, critically endangered, and threatened by annual and perennial non-timber crops.

Source: iNaturalist (2023).

5.3 Limits of current LCA and DOPA approaches to assess the impact of cocoa cultivation on biodiversity and perspectives to overcome them

Land use (occupation and transformation) is one of the main pressures included in the biodiversity assessment methods, In addition, many LCA-based biodiversity impact assessment methods **rely only on land use impact,** as was also the case of two of the methods selected for this study. These methods provide different characterisation factors for different types of land use in different countries, either including the intensity level of cultivation (Chaudhary & Brooks, 2018) or excluding it (Kuipers et al., 2021). In the selection of characterisation factors, it was noted that granularity of the characterisation of the land use types in the selected methods is insufficient to adequately assess biodiversity impacts of cocoa cultivation, which is commonly done in agroforestry systems. For example, Kuipers et al. (2021) distinguish only between cropland, pasture and forestry, which is one of the main factors explaining inconsistencies when ranking cultivation practices.

LCA is developed to assess environmental impacts of products per **functional unit**. In case of food, functional unit is often set as kg of food. This approach works well in case of single crop cultivation, i.e. monoculture, when certain area and inputs are used for one single crop type. In the case of cocoa, the same area is often used to cultivate multiple crops, e.g. cocoa as a main crop and a mix of, for example, corn, yam, cassava, legumes and banana or plantain planted during the first five years and

then plantain and banana, pineapple, palm fruit or rubber harvested together with the cocoa in intercropping/shade tree (Bengoa et al., 2020). In this case, fertilizers and pesticides can be allocated between cocoa and co-products according to e.g. mass or economic value of different products[10]. However, in the modelling of agroforestry systems, some trees may have very small or do not have an economic value at all; they rather provide different ecosystem services (Bengoa et al., 2020), which currently cannot properly be taken into account in LCA (VanderWilde & Newell, 2021).

The DOPA approach used here allowed to determine the number and identity of species threatened by annual and perennial non-timber crops in the six biggest cocoa producing countries, but it **could not reveal** whether such species are **threatened by cocoa specifically**. To further highlight which species are threatened specifically by cocoa, the IUCN information on threats present in the DOPA could be searched more extensively, e.g. by using text mining. This has already been done to reveal the species threatened by oil palm plantations (Meijaard et al., 2020).

Finally, neither the LCA nor the DOPA approaches used in this report allow to investigate the impact of cocoa cultivation on **soil biodiversity**, which is indeed known to be affected by agriculture, to different extent depending on agricultural practices (e.g. Labouyrie et al., 2023). To overcome such shortcomings, studies carrying out field analyses in cocoa producing countries to investigate how soil biodiversity changes along a gradient of land use going from non-cultivated forests to full-sun cocoa plantations are essential (e.g. Eggleton et al., 2002; Tadu et al., 2014; Tondoh et al., 2015). More broadly, **field analyses** to investigate how biodiversity is changing across different types of agricultural practices would permit to highlight the influence of agricultural practices on biodiversity at field scale, which are not captured neither by the LCA nor by the DOPA approaches used here.

[10] For example, in the agroforestry datasets used in this data, the majority of the impacts are allocated for cocoa (80%-87%, depending on the country (Bengoa et al., 2020)).

6 Conclusions

The EU Biodiversity Strategy for 2030 highlights the need to better integrate biodiversity considerations into decision-making, and commits to the development of methods to measure the environmental footprint of products and organisations life cycle. In this study, potential biodiversity impacts of cocoa cultivation in different countries and using different cultivation systems were assessed using two life cycle assessment (LCA) methods, which assess biodiversity impact through land occupation and transformation. These results were compared with the potential biodiversity impacts obtained with the Digital Observatory for Protected Areas (DOPA), which can be used to assess the state of and the pressure on biodiversity and ecosystem services at multiple scales (protected area, country and ecoregion), but not taking into account cultivation systems applied.

Results indicate that, according to the two LCA approaches considering only land occupation and transformation as pressures, agroforestry has a higher biodiversity impact per kg of cocoa produced than more intensive cultivation systems, which contradicts some findings from the scientific literature. To broaden the approach, the biodiversity impact was assessed using other LCA methods including also other pressures in addition to land use (e.g. ecotoxicity, climate change). In that case, agroforestry does not always have the highest impact.

When comparing country rankings in terms of potential biodiversity impacts due to cocoa cultivation using LCA and DOPA approaches, it can be noticed that they are not always consistent. LCA and DOPA are complementary to assess biodiversity impacts due to cocoa cultivation, which would further benefit from field studies. However, there are some limits in using the one and/or the other approach for assessing biodiversity impacts, which need further investigation and improvement. These limits include:

- relying only land use as a pressure in the LCA-based methods;
- the DOPA approach can reveal the number and identity of species threatened by annual and perennial non-timber crops, but cannot easily reveal whether they are threatened by a specific crop;
- neither the LCA nor the DOPA approaches allow to investigate the impact on soil biodiversity.

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List of abbreviations

CBD	Convention on Biological Diversity
DOPA	Digital Observatory for Protected Areas
EC	European Commission
EU	European Union
IUCN	International Union for the Conservation of Nature
LCA	Life Cycle Assessment
WFLDB	World Food LCA database

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Annexes

Annex 1. Characterisation factors

The following tables present the characterisation factors used in this study, highlighting the highest factors in each method throughout countries and cultivation systems with red colour, the lowest with green, and the others in between.

Table A.1.1. Land occupation characterisation factors (CF, PDF.m^{-2}). Red colour refers to the highest CF in the specific method throughout countries, green colour to the lowest CF, and yellow is in the middle.

Country	Cultivation system	Kuipers et al. (2021)	Chaudhary & Brooks (2018)[1)]	Chaudhary & Brooks (2018)[2)]
Ivory Coast	Agroforestry	5.93E-12	3.08E-13	2.85E-13
	Low input	5.84E-12	2.80E-13	2.80E-13
	Improved	5.84E-12	2.93E-13	2.93E-13
Ghana	Agroforestry	5.59E-12	2.32E-13	2.14E-13
	Low input	5.46E-12	2.11E-13	2.11E-13
	Improved	5.46E-12	2.22E-13	2.22E-13
Cameroon	Agroforestry	3.85E-11	4.52E-13	4.16E-13
	Low input	3.23E-11	4.21E-13	4.21E-13
	Improved	3.23E-11	4.40E-13	4.40E-13
Indonesia	Agroforestry	8.13E-12	1.00E-12	9.30E-13
	Medium input	8.98E-12	9.45E-13	9.45E-13
	High input	8.98E-12	9.53E-13	9.53E-13
Brazil	Agroforestry	1.25E-12	2.34E-13	2.13E-13
	Medium input	1.27E-12	2.43E-13	2.43E-13
	High input	1.27E-12	2.44E-13	2.44E-13
Ecuador	Agroforestry	7.31E-12	2.16E-12	1.39E-13
	Medium input	7.83E-12	2.23E-12	2.23E-12
	High input	7.83E-12	2.24E-12	2.24E-12

(1) Plantation forestry with minimal use for agroforestry
(2) Managed forest with light use for agroforestry

Source: Kuipers et al. (2021); Chaudhary & Brooks (2018).

Table A.1.2. Land transformation characterisation factors (PDF/year/m^2). Red colour refers to the highest CF in the specific method throughout countries, green colour to the lowest CF, and yellow is in the middle.

Country	Cultivation system	Kuipers et al. (2021)	Chaudhary & Brooks (2018)[1)]	Chaudhary & Brooks (2018)[2)]
Ivory Coast	Agroforestry	4.88E-10	2.83E-09	1.54E-09
	Low input	4.85E-10	2.39E-09	2.39E-09
	Improved	4.85E-10	3.03E-09	3.03E-09
Ghana	Agroforestry	4.52E-10	2.09E-09	1.14E-09
	Low input	4.48E-10	1.77E-09	1.77E-09
	Improved	4.48E-10	2.24E-09	2.24E-09
Cameroon	Agroforestry	1.79E-09	9.63E-09	5.23E-09
	Low input	1.51E-09	8.12E-09	8.12E-09
	Improved	1.51E-09	1.03E-08	1.03E-08
Indonesia	Agroforestry	9.23E-10	4.27E-08	2.35E-08
	Medium input	1.04E-09	4.56E-08	4.56E-08
	High input	1.04E-09	4.72E-08	4.72E-08
Brazil	Agroforestry	1.02E-10	8.55E-09	4.64E-09
	Medium input	1.04E-10	9.15E-09	9.15E-09
	High input	1.04E-10	9.48E-09	9.48E-09
Ecuador	Agroforestry	6.80E-10	1.08E-07	5.77E-09
	Medium input	7.28E-10	1.15E-07	1.15E-07
	High input	7.28E-10	1.19E-07	1.19E-07

([1]) Plantation forestry with minimal use for agroforestry
([2]) Managed forest with light use for agroforestry

Source: Kuipers et al. (2021), Chaudhary & Brooks (2018).

Annex 2. List of species threatened by annual and perennial non-timber crops in Ivory Coast, Ghana, Cameroon, Indonesia, Brazil and Ecuador

This list includes taxonomic attributes of species (class, family, genus, scientific name) as well as whether they are endemic (i.e. only present in one country) or not, their Red List category, and whether they are present in Ivory Coast, Ghana, Cameroon, Indonesia, Brazil and Ecuador.

class	order	family	genus	scientific name	endemic	category	Ivory Coast	Ghana	Cameroon	Indonesia	Brazil	Ecuador
Mammalia	Chiroptera	Pteropodidae	Acerodon	Acerodon celebensis	True	Vulnerable					1	
Mammalia	Rodentia	Sciuridae	Aeromys	Aeromys thomasi		Least Concern					1	
Mammalia	Chiroptera	Pteropodidae	Aethalops	Aethalops alecto		Least Concern					1	
Mammalia	Rodentia	Cricetidae	Deltamys	Deltamys kempi		Least Concern						1
Mammalia	Rodentia	Cricetidae	Neomicroxus	Neomicroxus latebricola		Endangered						1
Mammalia	Rodentia	Cricetidae	Akodon	Akodon sanctipaulensis	True	Data Deficient						1
Mammalia	Cetartiodactyla	Bovidae	Alcelaphus	Alcelaphus buselaphus		Least Concern		1	1	1		
Mammalia	Primates	Atelidae	Alouatta	Alouatta ululata	True	Endangered						1
Mammalia	Chiroptera	Furipteridae	Amorphochilus	Amorphochilus schnablii		Vulnerable						1
Mammalia	Rodentia	Anomaluridae	Anomalurus	Anomalurus pelii		Least Concern		1	1			
Mammalia	Rodentia	Anomaluridae	Anomalurus	Anomalurus pusillus		Least Concern				1		
Mammalia	Carnivora	Mustelidae	Aonyx	Aonyx capensis		Near Threatened		1	1	1		
Mammalia	Carnivora	Mustelidae	Aonyx	Aonyx congicus		Near Threatened				1		
Mammalia	Primates	Aotidae	Aotus	Aotus lemurinus		Vulnerable						1
Mammalia	Primates	Lorisidae	Arctocebus	Arctocebus aureus		Least Concern				1		
Mammalia	Primates	Lorisidae	Arctocebus	Arctocebus calabarensis		Near Threatened				1		
Mammalia	Chiroptera	Hipposideridae	Aselliscus	Aselliscus tricuspidatus		Least Concern					1	
Mammalia	Primates	Atelidae	Ateles	Ateles belzebuth		Endangered						1 1
Mammalia	Primates	Atelidae	Ateles	Ateles marginatus	True	Endangered						1
Mammalia	Primates	Atelidae	Ateles	Ateles paniscus		Vulnerable						1
Mammalia	Cetartiodactyla	Suidae	Babyrousa	Babyrousa babyrussa	True	Vulnerable					1	
Mammalia	Chiroptera	Emballonuridae	Balantiopteryx	Balantiopteryx infusca		Vulnerable						1
Mammalia	Rodentia	Cricetidae	Bibimys	Bibimys labiosus		Least Concern						1
Mammalia	Cetartiodactyla	Cervidae	Blastocerus	Blastocerus dichotomus		Vulnerable						1
Mammalia	Cetartiodactyla	Bovidae	Bos	Bos javanicus		Endangered					1	
Mammalia	Primates	Atelidae	Brachyteles	Brachyteles arachnoides	True	Critically Endangered						1
Mammalia	Primates	Atelidae	Brachyteles	Brachyteles hypoxanthus	True	Critically Endangered						1
Mammalia	Pilosa	Bradypodidae	Bradypus	Bradypus torquatus	True	Vulnerable						1
Mammalia	Pilosa	Bradypodidae	Bradypus	Bradypus variegatus		Least Concern						1 1
Mammalia	Cetartiodactyla	Bovidae	Bubalus	Bubalus depressicornis	True	Endangered					1	
Mammalia	Cetartiodactyla	Bovidae	Bubalus	Bubalus quarlesi	True	Endangered					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys andrewsi	True	Least Concern					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys chrysocomus	True	Least Concern					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys coelestis	True	Endangered					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys fratrorum	True	Vulnerable					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys penitus	True	Least Concern					1	
Mammalia	Rodentia	Muridae	Bunomys	Bunomys prolatus	True	Endangered					1	
Mammalia	Cingulata	Chlamyphoridae	Cabassous	Cabassous centralis		Data Deficient						1
Mammalia	Cingulata	Chlamyphoridae	Cabassous	Cabassous tatouay		Least Concern						1
Mammalia	Cingulata	Chlamyphoridae	Cabassous	Cabassous unicinctus		Least Concern						1 1
Mammalia	Primates	Pitheciidae	Cacajao	Cacajao calvus		Vulnerable						1
Mammalia	Primates	Pitheciidae	Callicebus	Callicebus personatus	True	Vulnerable						1
Mammalia	Primates	Callitrichidae	Callimico	Callimico goeldii		Vulnerable						1
Mammalia	Primates	Callitrichidae	Callithrix	Callithrix flaviceps	True	Critically Endangered						1
Mammalia	Primates	Callitrichidae	Callithrix	Callithrix geoffroyi	True	Least Concern						1
Mammalia	Primates	Callitrichidae	Callithrix	Callithrix kuhlii	True	Vulnerable						1
Mammalia	Rodentia	Sciuridae	Callosciurus	Callosciurus adamsi		Near Threatened					1	
Mammalia	Rodentia	Sciuridae	Callosciurus	Callosciurus baluensis		Least Concern					1	
Mammalia	Rodentia	Sciuridae	Callosciurus	Callosciurus melanogaster	True	Vulnerable					1	
Mammalia	Rodentia	Sciuridae	Callosciurus	Callosciurus prevostii		Least Concern					1	
Mammalia	Carnivora	Felidae	Caracal	Caracal caracal		Least Concern		1	1	1		
Mammalia	Rodentia	Echimyidae	Carterodon	Carterodon sulcidens	True	Data Deficient						1
Mammalia	Carnivora	Felidae	Catopuma	Catopuma badia		Endangered					1	
Mammalia	Carnivora	Felidae	Catopuma	Catopuma temminckii		Near Threatened					1	
Mammalia	Primates	Cebidae	Sapajus	Sapajus xanthosternos	True	Critically Endangered						1

Mammalia	Cetartiodactyla	Bovidae	Cephalophus	Cephalophus callipygus		Least Concern			1					
Mammalia	Cetartiodactyla	Bovidae	Cephalophus	Cephalophus nigrifrons		Least Concern			1					
Mammalia	Cetartiodactyla	Bovidae	Cephalophus	Cephalophus rufilatus		Least Concern	1	1	1					
Mammalia	Cetartiodactyla	Bovidae	Cephalophus	Cephalophus silvicultor		Near Threatened	1	1	1					
Mammalia	Cetartiodactyla	Bovidae	Cephalophus	Cephalophus zebra		Vulnerable	1							
Mammalia	Primates	Cercopithecidae	Cercocebus	Cercocebus torquatus		Endangered			1					
Mammalia	Primates	Cercopithecidae	Cercocebus	Cercocebus lunulatus		Endangered	1	1						
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus cephus		Least Concern			1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus erythrotis		Vulnerable			1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus mona		Near Threatened		1	1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus neglectus		Least Concern			1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus nictitans		Near Threatened	1		1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus petaurista		Near Threatened	1	1						
Mammalia	Primates	Cercopithecidae	Allochrocebus	Allochrocebus preussi		Endangered			1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus roloway		Critically Endangered	1	1						
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus diana		Endangered	1							
Mammalia	Chiroptera	Molossidae	Chaerephon	Chaerephon bemmeleni		Least Concern	1		1					
Mammalia	Chiroptera	Molossidae	Chaerephon	Chaerephon johorensis		Vulnerable				1				
Mammalia	Chiroptera	Molossidae	Chaerephon	Chaerephon russatus		Data Deficient	1	1	1					
Mammalia	Rodentia	Erethizontidae	Chaetomys	Chaetomys subspinosus	True	Vulnerable					1			
Mammalia	Chiroptera	Molossidae	Cheiromeles	Cheiromeles parvidens		Least Concern				1				
Mammalia	Eulipotyphla	Soricidae	Chimarrogale	Chimarrogale sumatrana	True	Data Deficient				1				
Mammalia	Chiroptera	Pteropodidae	Chironax	Chironax melanocephalus		Least Concern				1				
Mammalia	Rodentia	Muridae	Chiropodomys	Chiropodomys muroides		Data Deficient				1				
Mammalia	Rodentia	Muridae	Chiropodomys	Chiropodomys pusillus		Data Deficient				1				
Mammalia	Primates	Pitheciidae	Chiropotes	Chiropotes albinasus	True	Vulnerable					1			
Mammalia	Chiroptera	Phyllostomidae	Choeroniscus	Choeroniscus periosus		Vulnerable						1		
Mammalia	Pilosa	Megalonychidae	Choloepus	Choloepus hoffmanni		Least Concern					1	1		
Mammalia	Carnivora	Canidae	Chrysocyon	Chrysocyon brachyurus		Near Threatened					1			
Mammalia	Rodentia	Echimyidae	Clyomys	Clyomys laticeps		Least Concern					1			
Mammalia	Chiroptera	Hipposideridae	Coelops	Coelops robinsoni		Vulnerable				1				
Mammalia	Primates	Cercopithecidae	Colobus	Colobus guereza		Least Concern			1					
Mammalia	Primates	Cercopithecidae	Colobus	Colobus polykomos		Endangered	1							
Mammalia	Primates	Cercopithecidae	Colobus	Colobus satanas		Vulnerable			1					
Mammalia	Primates	Cercopithecidae	Colobus	Colobus vellerosus		Critically Endangered	1	1						
Amphibia	Anura	Conrauidae	Conraua	Conraua goliath		Endangered			1					
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura manengubae	True	Vulnerable			1					
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura nimbae		Near Threatened	1							
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura wimmeri	True	Critically Endangered	1							
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura beccarii	True	Least Concern				1				
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura paradoxura	True	Least Concern				1				
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura tenuis		Data Deficient				1				
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura picea	True	Endangered			1					
Mammalia	Rodentia	Muridae	Crunomys	Crunomys celebensis	True	Data Deficient				1				
Mammalia	Rodentia	Ctenomyidae	Ctenomys	Ctenomys minutus	True	Data Deficient					1			
Mammalia	Rodentia	Ctenomyidae	Ctenomys	Ctenomys torquatus		Least Concern					1			
Mammalia	Carnivora	Canidae	Cuon	Cuon alpinus		Endangered				1				
Mammalia	Pilosa	Cyclopedidae	Cyclopes	Cyclopes didactylus		Least Concern					1	1		
Mammalia	Carnivora	Viverridae	Cynogale	Cynogale bennettii		Endangered				1				
Mammalia	Cingulata	Dasypodidae	Dasypus	Dasypus hybridus		Near Threatened					1			
Mammalia	Cingulata	Dasypodidae	Dasypus	Dasypus septemcinctus		Least Concern					1			
Mammalia	Dasyuromorphia	Dasyuridae	Dasyurus	Dasyurus albopunctatus		Near Threatened				1				
Mammalia	Scandentia	Tupaiidae	Dendrogale	Dendrogale melanura		Data Deficient				1				
Mammalia	Diprotodontia	Macropodidae	Dendrolagus	Dendrolagus goodfellowi		Endangered				1				
Mammalia	Diprotodontia	Macropodidae	Dendrolagus	Dendrolagus inustus		Vulnerable				1				
Mammalia	Diprotodontia	Macropodidae	Dendrolagus	Dendrolagus ursinus	True	Vulnerable				1				

Mammalia	Diprotodontia	Macropodidae	Dendrolagus	Dendrolagus mbaiso	True	Endangered				1		
Mammalia	Perissodactyla	Rhinocerotidae	Dicerorhinus	Dicerorhinus sumatrensis		Critically Endangered				1		
Mammalia	Carnivora	Viverridae	Diplogale	Diplogale hosei		Vulnerable				1		
Mammalia	Chiroptera	Pteropodidae	Dobsonia	Dobsonia emersa	True	Vulnerable				1		
Mammalia	Diprotodontia	Macropodidae	Dorcopsis	Dorcopsis luctuosa		Vulnerable				1		
Mammalia	Rodentia	Sciuridae	Dremomys	Dremomys everetti		Least Concern				1		
Mammalia	Carnivora	Canidae	Atelocynus	Atelocynus microtis		Near Threatened					1	1
Mammalia	Carnivora	Canidae	Lycalopex	Lycalopex sechurae		Near Threatened						1
Mammalia	Carnivora	Canidae	Lycalopex	Lycalopex vetulus	True	Near Threatened					1	
Mammalia	Carnivora	Canidae	Lycalopex	Lycalopex gymnocercus		Least Concern					1	
Mammalia	Chiroptera	Pteropodidae	Dyacopterus	Dyacopterus spadiceus		Near Threatened				1		
Mammalia	Rodentia	Echimyidae	Phyllomys	Phyllomys brasiliensis	True	Endangered					1	
Mammalia	Rodentia	Echimyidae	Phyllomys	Phyllomys dasythrix	True	Least Concern					1	
Mammalia	Rodentia	Echimyidae	Callistomys	Callistomys pictus	True	Endangered					1	
Mammalia	Rodentia	Echimyidae	Phyllomys	Phyllomys unicolor	True	Critically Endangered					1	
Mammalia	Rodentia	Muridae	Echiothrix	Echiothrix leucura	True	Endangered				1		
Mammalia	Peramelemorphia	Peramelidae	Echymipera	Echymipera rufescens		Least Concern				1		
Mammalia	Proboscidea	Elephantidae	Elephas	Elephas maximus		Endangered				1		
Mammalia	Chiroptera	Emballonuridae	Emballonura	Emballonura raffrayana		Least Concern				1		
Mammalia	Chiroptera	Emballonuridae	Emballonura	Emballonura alecto		Least Concern				1		
Mammalia	Chiroptera	Emballonuridae	Emballonura	Emballonura beccarii		Least Concern				1		
Mammalia	Chiroptera	Emballonuridae	Emballonura	Emballonura monticola		Least Concern				1		
Mammalia	Chiroptera	Pteropodidae	Eonycteris	Eonycteris spelaea		Least Concern				1		
Mammalia	Rodentia	Sciuridae	Epixerus	Epixerus ebii		Least Concern	1	1	1			
Mammalia	Chiroptera	Vespertilionidae	Eptesicus	Eptesicus innoxius		Near Threatened						1
Mammalia	Primates	Galagidae	Euoticus	Euoticus pallidus		Near Threatened			1			
Mammalia	Rodentia	Sciuridae	Exilisciurus	Exilisciurus exilis		Data Deficient				1		
Mammalia	Rodentia	Sciuridae	Funisciurus	Funisciurus substriatus		Data Deficient		1				
Mammalia	Primates	Galagidae	Sciurocheirus	Sciurocheirus alleni		Near Threatened			1			
Mammalia	Carnivora	Viverridae	Genetta	Genetta johnstoni		Near Threatened	1	1				
Mammalia	Carnivora	Viverridae	Genetta	Genetta cristata		Vulnerable			1			
Mammalia	Cetartiodactyla	Giraffidae	Giraffa	Giraffa camelopardalis		Vulnerable			1			
Mammalia	Primates	Hominidae	Gorilla	Gorilla gorilla		Critically Endangered			1			
Mammalia	Rodentia	Muridae	Haeromys	Haeromys minahassae	True	Near Threatened				1		
Mammalia	Rodentia	Muridae	Haeromys	Haeromys pusillus		Vulnerable				1		
Mammalia	Rodentia	Muridae	Heimyscus	Heimyscus fumosus		Least Concern			1			
Mammalia	Carnivora	Ursidae	Helarctos	Helarctos malayanus		Vulnerable				1		
Mammalia	Cetartiodactyla	Hippopotamidae	Choeropsis	Choeropsis liberiensis		Endangered	1					
Mammalia	Cetartiodactyla	Hippopotamidae	Hippopotamus	Hippopotamus amphibius		Vulnerable	1	1	1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros papua	True	Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros beatus		Least Concern	1	1	1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros calcaratus		Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros camerunensis		Data Deficient			1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros cervinus		Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros cineraceus		Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros curtus		Endangered			1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros cyclops		Least Concern	1	1	1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros doriae		Near Threatened				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros dyacorum		Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros fuliginosus		Least Concern	1	1	1			
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros jonesi		Near Threatened	1	1				
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros maggietaylorae		Least Concern				1		
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros marisae		Vulnerable	1					
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros sorenseni	True	Endangered				1		
Mammalia	Cetartiodactyla	Bovidae	Hippotragus	Hippotragus equinus		Least Concern	1	1	1			
Mammalia	Rodentia	Cricetidae	Holochilus	Holochilus brasiliensis		Least Concern					1	

Mammalia	Carnivora	Hyaenidae	Hyaena	Hyaena hyaena		Near Threatened				1			
Mammalia	Rodentia	Muridae	Hybomys	Hybomys trivirgatus		Least Concern	1	1					
Mammalia	Cetartiodactyla	Tragulidae	Hyemoschus	Hyemoschus aquaticus		Least Concern	1	1	1				
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates agilis		Endangered					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates klossii	True	Endangered					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates lar		Endangered					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates moloch	True	Endangered					1		
Mammalia	Eulipotyphla	Erinaceidae	Hylomys	Hylomys parvus	True	Vulnerable					1		
Mammalia	Rodentia	Muridae	Hylomyscus	Hylomyscus baeri		Endangered	1	1					
Mammalia	Rodentia	Sciuridae	Hylopetes	Hylopetes sipora	True	Endangered					1		
Mammalia	Rodentia	Sciuridae	Hylopetes	Hylopetes spadiceus		Least Concern					1		
Mammalia	Rodentia	Sciuridae	Hylopetes	Hylopetes winstoni	True	Data Deficient					1		
Amphibia	Anura	Microhylidae	Stereocyclops	Stereocyclops histrio	True	Data Deficient						1	
Mammalia	Rodentia	Sciuridae	Hyosciurus	Hyosciurus ileile	True	Vulnerable					1		
Mammalia	Chiroptera	Pteropodidae	Hypsignathus	Hypsignathus monstrosus		Least Concern	1	1	1				
Mammalia	Rodentia	Cricetidae	Ichthyomys	Ichthyomys hydrobates		Least Concern							1
Mammalia	Rodentia	Cricetidae	Ichthyomys	Ichthyomys tweedii		Data Deficient							1
Mammalia	Rodentia	Sciuridae	Iomys	Iomys sipora	True	Endangered					1		
Mammalia	Rodentia	Muridae	Kadarsanomys	Kadarsanomys sodyi	True	Endangered					1		
Mammalia	Chiroptera	Vespertilionidae	Phoniscus	Phoniscus atrox		Near Threatened					1		
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula cuprosa		Data Deficient	1		1				
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula flora		Vulnerable					1		
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula intermedia		Near Threatened					1		
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula minuta		Near Threatened					1		
Mammalia	Chiroptera	Vespertilionidae	Phoniscus	Phoniscus papuensis		Vulnerable					1		
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula pellucida		Near Threatened					1		
Mammalia	Cetartiodactyla	Bovidae	Kobus	Kobus kob		Least Concern	1	1	1				
Mammalia	Rodentia	Cricetidae	Kunsia	Kunsia tomentosus		Least Concern						1	
Mammalia	Rodentia	Muridae	Lamottemys	Lamottemys okuensis	True	Endangered			1				
Mammalia	Rodentia	Muridae	Lenomys	Lenomys meyeri	True	Least Concern					1		
Mammalia	Primates	Callitrichidae	Leontopithecus	Leontopithecus caissara	True	Endangered						1	
Mammalia	Primates	Callitrichidae	Leontopithecus	Leontopithecus chrysopygus	True	Endangered						1	
Mammalia	Primates	Callitrichidae	Leontopithecus	Leontopithecus rosalia	True	Endangered						1	
Mammalia	Carnivora	Felidae	Leopardus	Leopardus pardalis		Least Concern						1	1
Mammalia	Carnivora	Felidae	Leopardus	Leopardus wiedii		Near Threatened						1	1
Mammalia	Rodentia	Muridae	Leopoldamys	Leopoldamys siporanus	True	Vulnerable					1		
Mammalia	Carnivora	Felidae	Leptailurus	Leptailurus serval		Least Concern	1	1	1				
Mammalia	Carnivora	Herpestidae	Liberiictis	Liberiictis kuhni		Vulnerable	1						
Mammalia	Chiroptera	Phyllostomidae	Lonchophylla	Lonchophylla bokermanni	True	Endangered						1	
Mammalia	Chiroptera	Phyllostomidae	Lonchophylla	Lonchophylla hesperia		Near Threatened							1
Mammalia	Carnivora	Mustelidae	Lontra	Lontra longicaudis		Near Threatened						1	1
Mammalia	Primates	Cercopithecidae	Lophocebus	Lophocebus albigena		Vulnerable			1				
Mammalia	Carnivora	Mustelidae	Lutra	Lutra lutra		Near Threatened					1		
Mammalia	Carnivora	Mustelidae	Hydrictis	Hydrictis maculicollis		Near Threatened	1		1				
Mammalia	Carnivora	Mustelidae	Lutra	Lutra sumatrana		Endangered					1		
Mammalia	Carnivora	Mustelidae	Lutrogale	Lutrogale perspicillata		Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca maura	True	Endangered					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca nemestrina		Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca nigra	True	Critically Endangered					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca tonkeana	True	Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca nigrescens	True	Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca hecki	True	Vulnerable					1		
Mammalia	Carnivora	Viverridae	Macrogalidia	Macrogalidia musschenbroekii	True	Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Mandrillus	Mandrillus leucophaeus		Endangered			1				
Mammalia	Primates	Cercopithecidae	Mandrillus	Mandrillus sphinx		Vulnerable			1				
Mammalia	Pholidota	Manidae	Smutsia	Smutsia gigantea		Endangered	1	1	1				

Mammalia	Pholidota	Manidae	Phataginus	Phataginus tetradactyla		Vulnerable	1	1	1				
Mammalia	Pholidota	Manidae	Phataginus	Phataginus tricuspis		Endangered	1	1	1				
Mammalia	Rodentia	Muridae	Margaretamys	Margaretamys beccarii	True	Data Deficient				1			
Mammalia	Rodentia	Muridae	Margaretamys	Margaretamys elegans	True	Near Threatened				1			
Mammalia	Rodentia	Muridae	Margaretamys	Margaretamys parvus	True	Data Deficient				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys dollmani	True	Data Deficient				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys hellwaldii	True	Least Concern				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys inflatus	True	Vulnerable				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys pagensis	True	Vulnerable				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys rajah		Vulnerable				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys wattsi	True	Endangered				1			
Mammalia	Rodentia	Muridae	Maxomys	Maxomys whiteheadi		Vulnerable				1			
Mammalia	Cetartiodactyla	Cervidae	Mazama	Mazama rufina		Vulnerable							1
Mammalia	Chiroptera	Pteropodidae	Megaerops	Megaerops wetmorei		Vulnerable				1			
Mammalia	Chiroptera	Phyllostomidae	Glyphonycteris	Glyphonycteris behnii		Data Deficient						1	
Mammalia	Afrosoricida	Tenrecidae	Micropotamogale	Micropotamogale lamottei		Vulnerable	1						
Mammalia	Rodentia	Cricetidae	Microryzomys	Microryzomys altissimus		Least Concern							1
Mammalia	Chiroptera	Phyllostomidae	Mimon	Mimon bennettii		Least Concern						1	
Mammalia	Chiroptera	Miniopteridae	Miniopterus	Miniopterus australis		Least Concern				1			
Mammalia	Chiroptera	Miniopteridae	Miniopterus	Miniopterus magnater		Least Concern				1			
Mammalia	Chiroptera	Miniopteridae	Miniopterus	Miniopterus medius		Least Concern				1			
Mammalia	Chiroptera	Miniopteridae	Miniopterus	Miniopterus tristis		Least Concern				1			
Mammalia	Chiroptera	Molossidae	Molossops	Molossops aequatorianus	True	Endangered							1
Mammalia	Chiroptera	Molossidae	Mops	Mops brachypterus		Least Concern	1	1	1				
Mammalia	Chiroptera	Molossidae	Mops	Mops congicus		Least Concern			1				
Mammalia	Chiroptera	Molossidae	Mops	Mops mops		Near Threatened				1			
Mammalia	Chiroptera	Molossidae	Mops	Mops nanulus		Least Concern	1	1	1				
Mammalia	Chiroptera	Molossidae	Mops	Mops petersoni		Near Threatened		1	1				
Mammalia	Chiroptera	Molossidae	Mops	Mops sarasinorum		Data Deficient				1			
Mammalia	Chiroptera	Molossidae	Mops	Mops spurrelli		Least Concern	1	1	1				
Mammalia	Chiroptera	Molossidae	Mops	Mops thersites		Least Concern	1	1	1				
Mammalia	Chiroptera	Molossidae	Mops	Mops trevori		Data Deficient	1	1					
Mammalia	Chiroptera	Emballonuridae	Mosia	Mosia nigrescens		Least Concern				1			
Mammalia	Chiroptera	Vespertilionidae	Murina	Murina aenea		Vulnerable				1			
Mammalia	Chiroptera	Vespertilionidae	Murina	Murina florium		Least Concern				1			
Mammalia	Chiroptera	Vespertilionidae	Murina	Murina rozendaali		Vulnerable				1			
Mammalia	Carnivora	Mustelidae	Mustela	Mustela felipei		Vulnerable							1
Mammalia	Chiroptera	Molossidae	Myopterus	Myopterus daubentonii		Data Deficient	1						
Mammalia	Chiroptera	Molossidae	Myopterus	Myopterus whitleyi		Least Concern		1	1				
Mammalia	Eulipotyphla	Soricidae	Myosorex	Myosorex okuensis	True	Vulnerable			1				
Mammalia	Eulipotyphla	Soricidae	Myosorex	Myosorex rumpii	True	Endangered			1				
Mammalia	Chiroptera	Vespertilionidae	Myotis	Myotis oxyotus		Least Concern							1
Mammalia	Chiroptera	Vespertilionidae	Myotis	Myotis ridleyi		Near Threatened				1			
Mammalia	Pilosa	Myrmecophagidae	Myrmecophaga	Myrmecophaga tridactyla		Vulnerable						1	1
Mammalia	Primates	Cercopithecidae	Nasalis	Nasalis larvatus		Endangered				1			
Mammalia	Chiroptera	Pteropodidae	Neopteryx	Neopteryx frosti	True	Endangered				1			
Mammalia	Lagomorpha	Leporidae	Nesolagus	Nesolagus netscheri	True	Data Deficient				1			
Mammalia	Rodentia	Cricetidae	Neusticomys	Neusticomys monticolus		Least Concern							1
Mammalia	Rodentia	Muridae	Niviventer	Niviventer cremoriventer		Least Concern				1			
Mammalia	Chiroptera	Nycteridae	Nycteris	Nycteris arge		Least Concern	1	1	1				
Mammalia	Chiroptera	Nycteridae	Nycteris	Nycteris intermedia		Least Concern	1	1	1				
Mammalia	Chiroptera	Nycteridae	Nycteris	Nycteris javanica	True	Vulnerable				1			
Mammalia	Chiroptera	Nycteridae	Nycteris	Nycteris major		Data Deficient	1		1				
Mammalia	Chiroptera	Nycteridae	Nycteris	Nycteris tragata		Near Threatened				1			
Mammalia	Chiroptera	Pteropodidae	Nyctimene	Nyctimene aello		Least Concern				1			
Mammalia	Chiroptera	Pteropodidae	Nyctimene	Nyctimene cyclotis	True	Data Deficient				1			

Mammalia	Chiroptera	Pteropodidae	Nyctimene	Nyctimene draconilla		Data Deficient					1		
Mammalia	Chiroptera	Pteropodidae	Nyctimene	Nyctimene certans		Least Concern					1		
Mammalia	Rodentia	Cricetidae	Oecomys	Oecomys cleberi	True	Data Deficient						1	
Mammalia	Rodentia	Cricetidae	Oecomys	Oecomys paricola		Data Deficient						1	
Mammalia	Carnivora	Felidae	Leopardus	Leopardus colocolo		Near Threatened						1	1
Mammalia	Carnivora	Felidae	Leopardus	Leopardus geoffroyi		Least Concern						1	
Mammalia	Cetartiodactyla	Delphinidae	Orcaella	Orcaella brevirostris		Endangered					1		
Mammalia	Rodentia	Cricetidae	Oreoryzomys	Oreoryzomys balneator		Data Deficient							1
Mammalia	Rodentia	Cricetidae	Mindomys	Mindomys hammondi	True	Endangered							1
Mammalia	Rodentia	Cricetidae	Hylaeamys	Hylaeamys oniscus	True	Near Threatened						1	
Mammalia	Rodentia	Muridae	Otomys	Otomys occidentalis		Vulnerable			1				
Mammalia	Cetartiodactyla	Bovidae	Ourebia	Ourebia ourebi		Least Concern	1	1	1				
Mammalia	Rodentia	Cricetidae	Brucepattersonius	Brucepattersonius iheringi		Least Concern						1	
Mammalia	Primates	Hominidae	Pan	Pan troglodytes		Endangered	1	1	1				
Mammalia	Carnivora	Felidae	Panthera	Panthera leo		Vulnerable			1				
Mammalia	Carnivora	Felidae	Panthera	Panthera onca		Near Threatened						1	1
Mammalia	Carnivora	Felidae	Panthera	Panthera pardus		Vulnerable	1	1	1	1			
Mammalia	Carnivora	Felidae	Panthera	Panthera tigris		Endangered				1			
Mammalia	Rodentia	Muridae	Papagomys	Papagomys armandvillei	True	Near Threatened				1			
Mammalia	Chiroptera	Pteropodidae	Paranyctimene	Paranyctimene raptor		Least Concern				1			
Mammalia	Carnivora	Felidae	Pardofelis	Pardofelis marmorata		Near Threatened				1			
Mammalia	Rodentia	Muridae	Paruromys	Paruromys dominator	True	Least Concern				1			
Mammalia	Rodentia	Muridae	Paulamys	Paulamys naso	True	Endangered				1			
Mammalia	Chiroptera	Pteropodidae	Penthetor	Penthetor lucasi		Least Concern				1			
Mammalia	Rodentia	Sciuridae	Petaurista	Petaurista petaurista		Least Concern				1			
Mammalia	Rodentia	Sciuridae	Petinomys	Petinomys genibarbis		Vulnerable				1			
Mammalia	Rodentia	Sciuridae	Petinomys	Petinomys hageni	True	Data Deficient				1			
Mammalia	Rodentia	Sciuridae	Petinomys	Petinomys lugens	True	Vulnerable				1			
Mammalia	Rodentia	Sciuridae	Petinomys	Petinomys setosus		Vulnerable				1			
Mammalia	Rodentia	Sciuridae	Petinomys	Petinomys vordermanni		Vulnerable				1			
Mammalia	Rodentia	Cricetidae	Phaenomys	Phaenomys ferrugineus	True	Endangered						1	
Mammalia	Diprotodontia	Phalangeridae	Phalanger	Phalanger alexandrae	True	Endangered				1			
Mammalia	Dasyuromorphia	Dasyuridae	Phascolosorex	Phascolosorex doriae	True	Least Concern				1			
Mammalia	Chiroptera	Vespertilionidae	Pipistrellus	Pipistrellus angulatus		Least Concern				1			
Mammalia	Chiroptera	Phyllostomidae	Platyrrhinus	Platyrrhinus chocoensis		Vulnerable							1
Mammalia	Rodentia	Muridae	Pogonomelomys	Pogonomelomys bruijnii	True	Least Concern				1			
Mammalia	Primates	Hominidae	Pongo	Pongo pygmaeus		Critically Endangered				1			
Mammalia	Rodentia	Muridae	Praomys	Praomys hartwigi	True	Vulnerable			1				
Mammalia	Rodentia	Muridae	Praomys	Praomys morio		Endangered			1				
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis comata	True	Endangered				1			
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis frontata		Vulnerable				1			
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis rubicunda		Vulnerable				1			
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis thomasi	True	Vulnerable				1			
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis siamensis		Near Threatened				1			
Mammalia	Cingulata	Chlamyphoridae	Priodontes	Priodontes maximus		Vulnerable						1	1
Mammalia	Carnivora	Felidae	Prionailurus	Prionailurus bengalensis		Least Concern				1			
Mammalia	Carnivora	Felidae	Prionailurus	Prionailurus planiceps		Endangered				1			
Mammalia	Primates	Cercopithecidae	Procolobus	Procolobus verus		Vulnerable	1	1					
Mammalia	Rodentia	Echimyidae	Trinomys	Trinomys dimidiatus	True	Least Concern						1	
Mammalia	Rodentia	Echimyidae	Proechimys	Proechimys goeldii	True	Least Concern						1	
Mammalia	Rodentia	Echimyidae	Proechimys	Proechimys roberti	True	Least Concern						1	
Mammalia	Carnivora	Felidae	Caracal	Caracal aurata		Vulnerable	1	1	1				
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus murinus	True	Least Concern				1			
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus weberi	True	Endangered				1			
Mammalia	Rodentia	Sciuridae	Protoxerus	Protoxerus aubinnii		Near Threatened	1	1					
Mammalia	Diprotodontia	Pseudocheiridae	Pseudochirops	Pseudochirops albertisii		Near Threatened				1			

Mammalia	Rodentia	Sciuridae	Pteromyscus	Pteromyscus pulverulentus		Endangered					1			
Mammalia	Carnivora	Mustelidae	Pteronura	Pteronura brasiliensis		Endangered						1		1
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus alecto		Least Concern					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus caniceps	True	Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus conspicillatus		Endangered					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus griseus		Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus hypomelanus		Near Threatened					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus macrotis		Least Concern					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus melanopogon	True	Endangered					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus neohibernicus		Least Concern					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus ocularis	True	Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus pohlei	True	Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus pumilus		Near Threatened					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus speciosus		Data Deficient					1			
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus vampyrus		Near Threatened					1			
Mammalia	Cetartiodactyla	Cervidae	Pudu	Pudu mephistophiles		Data Deficient								1
Mammalia	Carnivora	Felidae	Puma	Puma concolor		Least Concern						1		1
Mammalia	Rodentia	Muridae	Rattus	Rattus adustus	True	Data Deficient					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus annandalei		Least Concern					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus bontanus	True	Data Deficient					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus elaphinus	True	Near Threatened					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus enganus	True	Data Deficient					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus hainaldi	True	Endangered					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus hoffmanni	True	Least Concern					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus koopmani	True	Data Deficient					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus lugens	True	Vulnerable					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus marmosurus	True	Least Concern					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus simalurensis	True	Endangered					1			
Mammalia	Rodentia	Muridae	Rattus	Rattus xanthurus	True	Near Threatened					1			
Mammalia	Rodentia	Sciuridae	Ratufa	Ratufa bicolor		Near Threatened					1			
Mammalia	Rodentia	Sciuridae	Rheithrosciurus	Rheithrosciurus macrotis		Vulnerable					1			
Mammalia	Perissodactyla	Rhinocerotidae	Rhinoceros	Rhinoceros sondaicus		Critically Endangered					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus alcyone		Least Concern	1	1	1					
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus canuti	True	Vulnerable					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus creaghi		Least Concern					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus guineensis		Endangered	1							
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus macrotis		Least Concern					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus philippinensis		Least Concern					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus sedulus		Near Threatened					1			
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus simulator		Least Concern	1		1					
Mammalia	Peramelemorphia	Peramelidae	Rhynchomeles	Rhynchomeles prattorum	True	Endangered					1			
Mammalia	Chiroptera	Pteropodidae	Boneia	Boneia bidens	True	Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Rousettus	Rousettus spinalatus		Vulnerable					1			
Mammalia	Chiroptera	Pteropodidae	Rousettus	Rousettus amplexicaudatus		Least Concern					1			
Mammalia	Rodentia	Sciuridae	Rubrisciurus	Rubrisciurus rubriventer	True	Vulnerable					1			
Mammalia	Chiroptera	Emballonuridae	Saccolaimus	Saccolaimus peli		Least Concern	1	1	1					
Mammalia	Chiroptera	Emballonuridae	Saccopteryx	Saccopteryx leptura		Least Concern						1		1
Mammalia	Primates	Callitrichidae	Leontocebus	Leontocebus tripartitus		Near Threatened								1
Mammalia	Chiroptera	Pteropodidae	Scotonycteris	Scotonycteris ophiodon		Near Threatened	1	1	1					
Mammalia	Chiroptera	Vespertilionidae	Scotophilus	Scotophilus nigrita		Least Concern	1	1						
Mammalia	Rodentia	Cricetidae	Sigmodon	Sigmodon inopinatus	True	Vulnerable								1
Mammalia	Primates	Cercopithecidae	Simias	Simias concolor	True	Critically Endangered					1			
Mammalia	Cetartiodactyla	Delphinidae	Sousa	Sousa teuszii		Critically Endangered			1					
Mammalia	Carnivora	Canidae	Speothos	Speothos venaticus		Near Threatened						1		1
Mammalia	Diprotodontia	Phalangeridae	Spilocuscus	Spilocuscus rufoniger		Critically Endangered					1			
Mammalia	Diprotodontia	Phalangeridae	Strigocuscus	Strigocuscus celebensis	True	Near Threatened					1			

Mammalia	Chiroptera	Phyllostomidae	Sturnira	Sturnira nana		Endangered							1
Mammalia	Chiroptera	Pteropodidae	Styloctenium	Styloctenium wallacei	True	Near Threatened					1		
Mammalia	Eulipotyphla	Soricidae	Suncus	Suncus mertensi	True	Endangered					1		
Mammalia	Rodentia	Muridae	Sundamys	Sundamys infraluteus		Least Concern					1		
Mammalia	Rodentia	Muridae	Sundamys	Sundamys maxi	True	Vulnerable					1		
Mammalia	Rodentia	Muridae	Sundamys	Sundamys muelleri		Least Concern					1		
Mammalia	Rodentia	Sciuridae	Sundasciurus	Sundasciurus hippurus		Near Threatened					1		
Mammalia	Chiroptera	Pteropodidae	Syconycteris	Syconycteris hobbit		Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Sylvisorex	Sylvisorex morio	True	Endangered			1				
Mammalia	Rodentia	Muridae	Taeromys	Taeromys arcuatus	True	Least Concern					1		
Mammalia	Rodentia	Muridae	Taeromys	Taeromys callitrichus	True	Data Deficient					1		
Mammalia	Rodentia	Muridae	Taeromys	Taeromys celebensis	True	Least Concern					1		
Mammalia	Rodentia	Muridae	Taeromys	Taeromys hamatus	True	Data Deficient					1		
Mammalia	Rodentia	Muridae	Taeromys	Taeromys taerae	True	Vulnerable					1		
Mammalia	Pilosa	Myrmecophagidae	Tamandua	Tamandua mexicana		Least Concern							1
Mammalia	Pilosa	Myrmecophagidae	Tamandua	Tamandua tetradactyla		Least Concern						1	1
Mammalia	Perissodactyla	Tapiridae	Tapirus	Tapirus indicus		Endangered					1		
Mammalia	Perissodactyla	Tapiridae	Tapirus	Tapirus pinchaque		Endangered							1
Mammalia	Perissodactyla	Tapiridae	Tapirus	Tapirus terrestris		Vulnerable						1	1
Mammalia	Primates	Tarsiidae	Cephalopachus	Cephalopachus bancanus		Vulnerable					1		
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius dentatus	True	Vulnerable					1		
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius pumilus	True	Endangered					1		
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius sangirensis	True	Endangered					1		
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius pelengensis	True	Endangered					1		
Mammalia	Rodentia	Cricetidae	Thomasomys	Thomasomys taczanowskii		Least Concern							1
Mammalia	Didelphimorphia	Didelphidae	Thylamys	Thylamys macrurus		Near Threatened						1	
Mammalia	Cingulata	Chlamyphoridae	Tolypeutes	Tolypeutes matacus		Near Threatened						1	
Mammalia	Cingulata	Chlamyphoridae	Tolypeutes	Tolypeutes tricinctus	True	Vulnerable						1	
Mammalia	Primates	Cercopithecidae	Trachypithecus	Trachypithecus cristatus		Vulnerable					1		
Mammalia	Carnivora	Ursidae	Tremarctos	Tremarctos ornatus		Vulnerable							1
Mammalia	Sirenia	Trichechidae	Trichechus	Trichechus inunguis		Vulnerable						1	1
Mammalia	Sirenia	Trichechidae	Trichechus	Trichechus manatus		Vulnerable						1	
Mammalia	Sirenia	Trichechidae	Trichechus	Trichechus senegalensis		Vulnerable	1	1	1				
Mammalia	Chiroptera	Phyllostomidae	Vampyressa	Vampyressa melissa		Vulnerable							1
Mammalia	Chiroptera	Phyllostomidae	Vampyriscus	Vampyriscus nymphaea		Least Concern							1
Mammalia	Carnivora	Canidae	Vulpes	Vulpes pallida		Least Concern			1				
Mammalia	Rodentia	Cricetidae	Wilfredomys	Wilfredomys oenax		Endangered						1	
Mammalia	Rodentia	Cricetidae	Juliomys	Juliomys pictipes		Least Concern						1	
Mammalia	Monotremata	Tachyglossidae	Zaglossus	Zaglossus bruijnii		Critically Endangered					1		
Mammalia	Rodentia	Cricetidae	Euryoryzomys	Euryoryzomys emmonsae	True	Data Deficient						1	
Mammalia	Rodentia	Cricetidae	Hylaeamys	Hylaeamys laticeps	True	Vulnerable						1	
Amphibia	Anura	Hylidae	Xenohyla	Xenohyla eugenioi	True	Data Deficient						1	
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus hermogenesi	True	Least Concern						1	
Mammalia	Cetartiodactyla	Cervidae	Mazama	Mazama americana		Data Deficient						1	1
Mammalia	Cetartiodactyla	Cervidae	Mazama	Mazama nana		Vulnerable						1	
Mammalia	Primates	Lorisidae	Nycticebus	Nycticebus javanicus	True	Critically Endangered					1		
Mammalia	Primates	Hylobatidae	Symphalangus	Symphalangus syndactylus		Endangered					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca pagensis	True	Critically Endangered					1		
Mammalia	Primates	Cercopithecidae	Macaca	Macaca siberu	True	Endangered					1		
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis chrysomelas		Critically Endangered					1		
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis melalophos	True	Endangered					1		
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis mitrata	True	Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis potenziani	True	Critically Endangered					1		
Mammalia	Primates	Cercopithecidae	Trachypithecus	Trachypithecus auratus	True	Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Trachypithecus	Trachypithecus mauritius	True	Vulnerable					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates albibarbis	True	Endangered					1		

Mammalia	Primates	Hylobatidae	Hylobates	Hylobates muelleri	True	Endangered					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates abbotti		Endangered					1		
Mammalia	Primates	Hylobatidae	Hylobates	Hylobates funereus		Endangered					1		
Mammalia	Primates	Callitrichidae	Mico	Mico intermedius	True	Least Concern						1	
Mammalia	Primates	Callitrichidae	Mico	Mico leucippe	True	Least Concern						1	
Mammalia	Primates	Callitrichidae	Mico	Mico nigriceps	True	Near Threatened						1	
Mammalia	Primates	Atelidae	Alouatta	Alouatta guariba		Vulnerable						1	
Mammalia	Primates	Pitheciidae	Callicebus	Callicebus barbarabrownae	True	Critically Endangered						1	
Mammalia	Primates	Pitheciidae	Callicebus	Callicebus melanochir	True	Vulnerable						1	
Mammalia	Primates	Pitheciidae	Callicebus	Callicebus nigrifrons	True	Near Threatened						1	
Mammalia	Primates	Callitrichidae	Leontocebus	Leontocebus nigricollis		Least Concern						1	1
Mammalia	Primates	Callitrichidae	Saguinus	Saguinus imperator		Least Concern						1	
Mammalia	Primates	Pitheciidae	Callicebus	Callicebus coimbrai	True	Endangered						1	
Mammalia	Primates	Pitheciidae	Chiropotes	Chiropotes satanas	True	Endangered						1	
Mammalia	Primates	Atelidae	Alouatta	Alouatta palliata		Vulnerable							1
Mammalia	Chiroptera	Vespertilionidae	Myotis	Myotis gomantongensis		Least Concern					1		
Mammalia	Didelphimorphia	Didelphidae	Thylamys	Thylamys velutinus	True	Near Threatened						1	
Mammalia	Paucituberculata	Caenolestidae	Caenolestes	Caenolestes caniventer		Near Threatened							1
Mammalia	Paucituberculata	Caenolestidae	Caenolestes	Caenolestes convelatus		Vulnerable							1
Mammalia	Peramelemorphia	Peramelidae	Isoodon	Isoodon macrourus		Least Concern					1		
Mammalia	Diprotodontia	Pseudocheiridae	Pseudochirops	Pseudochirops coronatus	True	Vulnerable					1		
Mammalia	Eulipotyphla	Erinaceidae	Echinosorex	Echinosorex gymnura		Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura buettikoferi		Least Concern	1	1					
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura douceti		Least Concern	1						
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura elongata	True	Least Concern					1		
Mammalia	Diprotodontia	Phalangeridae	Ailurops	Ailurops ursinus	True	Vulnerable					1		
Mammalia	Diprotodontia	Pseudocheiridae	Pseudochirulus	Pseudochirulus schlegeli	True	Vulnerable					1		
Mammalia	Primates	Callitrichidae	Leontopithecus	Leontopithecus chrysomelas	True	Endangered						1	
Mammalia	Primates	Callitrichidae	Saguinus	Saguinus bicolor	True	Critically Endangered						1	
Mammalia	Primates	Cercopithecidae	Papio	Papio anubis		Least Concern	1	1	1				
Mammalia	Cetartiodactyla	Cervidae	Mazama	Mazama bororo	True	Vulnerable						1	
Mammalia	Primates	Cercopithecidae	Piliocolobus	Piliocolobus preussi		Critically Endangered			1				
Amphibia	Anura	Pelodryadidae	Litoria	Litoria bicolor		Least Concern					1		
Amphibia	Anura	Pelodryadidae	Litoria	Litoria nasuta		Least Concern					1		
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca albolineata	True	Least Concern						1	
Mammalia	Lagomorpha	Leporidae	Lepus	Lepus nigricollis		Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura grandiceps		Near Threatened	1	1					
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura levicula	True	Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura maxi		Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura monticola		Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura muricauda		Least Concern	1	1					
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura nigeriae		Least Concern			1				
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura rhoditis	True	Least Concern					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura nigripes	True	Least Concern					1		
Mammalia	Scandentia	Ptilocercidae	Ptilocercus	Ptilocercus lowii		Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia dorsalis		Data Deficient					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia gracilis		Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia javanica	True	Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia minor		Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia montana		Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia splendidula	True	Least Concern					1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia tana		Least Concern					1		
Mammalia	Dermoptera	Cynocephalidae	Galeopterus	Galeopterus variegatus		Least Concern					1		
Mammalia	Primates	Callitrichidae	Callithrix	Callithrix jacchus	True	Least Concern						1	
Mammalia	Primates	Callitrichidae	Callithrix	Callithrix penicillata	True	Least Concern						1	
Mammalia	Primates	Callitrichidae	Mico	Mico argentatus	True	Least Concern						1	

Mammalia	Primates	Callitrichidae	Saguinus	Saguinus inustus		Least Concern						1	
Mammalia	Primates	Callitrichidae	Saguinus	Saguinus labiatus		Least Concern						1	
Mammalia	Chiroptera	Emballonuridae	Emballonura	Emballonura serii		Vulnerable					1		
Mammalia	Primates	Cebidae	Saimiri	Saimiri boliviensis		Least Concern						1	
Mammalia	Primates	Cebidae	Saimiri	Saimiri ustus	True	Near Threatened						1	
Mammalia	Primates	Aotidae	Aotus	Aotus azarae		Least Concern						1	
Mammalia	Primates	Aotidae	Aotus	Aotus nancymaae		Vulnerable						1	
Mammalia	Primates	Aotidae	Aotus	Aotus trivirgatus		Least Concern						1	
Mammalia	Primates	Aotidae	Aotus	Aotus vociferans		Least Concern						1	1
Mammalia	Primates	Atelidae	Alouatta	Alouatta caraya		Near Threatened						1	
Mammalia	Primates	Atelidae	Ateles	Ateles chamek		Endangered						1	
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus donacophilus		Least Concern						1	
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus discolor		Least Concern							1
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus moloch	True	Least Concern						1	
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus brunneus	True	Vulnerable						1	
Mammalia	Primates	Cercopithecidae	Miopithecus	Miopithecus ogouensis		Near Threatened				1			
Mammalia	Primates	Callitrichidae	Callibella	Callibella humilis	True	Least Concern						1	
Mammalia	Carnivora	Herpestidae	Bdeogale	Bdeogale nigripes		Least Concern				1			
Mammalia	Carnivora	Herpestidae	Herpestes	Herpestes brachyurus		Near Threatened					1		
Mammalia	Carnivora	Herpestidae	Herpestes	Herpestes semitorquatus		Near Threatened					1		
Mammalia	Carnivora	Mustelidae	Galictis	Galictis vittata		Least Concern						1	1
Mammalia	Carnivora	Mustelidae	Eira	Eira barbara		Least Concern						1	1
Mammalia	Carnivora	Mustelidae	Mustela	Mustela frenata		Least Concern						1	1
Mammalia	Carnivora	Procyonidae	Potos	Potos flavus		Least Concern						1	1
Mammalia	Carnivora	Procyonidae	Nasua	Nasua nasua		Least Concern						1	1
Mammalia	Carnivora	Procyonidae	Procyon	Procyon cancrivorus		Least Concern						1	1
Mammalia	Carnivora	Viverridae	Hemigalus	Hemigalus derbyanus		Near Threatened					1		
Mammalia	Carnivora	Viverridae	Arctictis	Arctictis binturong		Vulnerable					1		
Mammalia	Carnivora	Viverridae	Arctogalidia	Arctogalidia trivirgata		Least Concern					1		
Mammalia	Carnivora	Viverridae	Paguma	Paguma larvata		Least Concern					1		
Mammalia	Carnivora	Prionodontidae	Prionodon	Prionodon linsang		Least Concern					1		
Mammalia	Cetartiodactyla	Suidae	Sus	Sus barbatus		Vulnerable					1		
Mammalia	Cetartiodactyla	Suidae	Sus	Sus celebensis	True	Near Threatened					1		
Mammalia	Cetartiodactyla	Tayassuidae	Pecari	Pecari tajacu		Least Concern						1	1
Mammalia	Cetartiodactyla	Tayassuidae	Tayassu	Tayassu pecari		Vulnerable						1	1
Mammalia	Cetartiodactyla	Tragulidae	Tragulus	Tragulus javanicus	True	Data Deficient					1		
Mammalia	Cetartiodactyla	Tragulidae	Tragulus	Tragulus napu		Least Concern					1		
Mammalia	Cetartiodactyla	Cervidae	Rusa	Rusa unicolor		Vulnerable					1		
Mammalia	Lagomorpha	Leporidae	Lepus	Lepus victoriae		Least Concern	1	1	1				
Mammalia	Cetartiodactyla	Cervidae	Muntiacus	Muntiacus atherodes		Near Threatened					1		
Mammalia	Cetartiodactyla	Cervidae	Muntiacus	Muntiacus muntjak		Least Concern					1		
Mammalia	Cetartiodactyla	Cervidae	Odocoileus	Odocoileus virginianus		Least Concern						1	1
Mammalia	Rodentia	Sciuridae	Rhinosciurus	Rhinosciurus laticaudatus		Near Threatened					1		
Mammalia	Primates	Callitrichidae	Mico	Mico emiliae	True	Least Concern						1	
Mammalia	Primates	Callitrichidae	Mico	Mico saterei	True	Least Concern						1	
Mammalia	Primates	Cebidae	Sapajus	Sapajus robustus	True	Endangered						1	
Mammalia	Primates	Pitheciidae	Chiropotes	Chiropotes utahickae	True	Vulnerable						1	
Mammalia	Primates	Atelidae	Alouatta	Alouatta discolor	True	Vulnerable						1	
Mammalia	Carnivora	Mustelidae	Aonyx	Aonyx cinereus		Vulnerable					1		
Mammalia	Chiroptera	Vespertilionidae	Glauconycteris	Glauconycteris argentata		Least Concern				1			
Mammalia	Chiroptera	Vespertilionidae	Glauconycteris	Glauconycteris beatrix		Least Concern	1	1	1				
Mammalia	Chiroptera	Vespertilionidae	Glauconycteris	Glauconycteris gleni		Data Deficient			1				
Mammalia	Chiroptera	Vespertilionidae	Glauconycteris	Glauconycteris superba		Least Concern	1	1					
Mammalia	Chiroptera	Vespertilionidae	Hypsugo	Hypsugo eisentrauti		Data Deficient			1				
Mammalia	Chiroptera	Vespertilionidae	Neoromicia	Neoromicia brunnea		Near Threatened	1	1	1				
Mammalia	Eulipotyphla	Soricidae	Sylvisorex	Sylvisorex camerunensis		Vulnerable			1				

Mammalia	Rodentia	Muridae	Hylomyscus	Hylomyscus grandis	True	Endangered		1			
Mammalia	Rodentia	Muridae	Lophuromys	Lophuromys dieterleni	True	Endangered		1			
Mammalia	Rodentia	Muridae	Otomys	Otomys burtoni	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis crusculum		Near Threatened	1				
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis tuberosus		Data Deficient		1			
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis variabilis		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa melanogaster		Vulnerable		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa oreas	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa pulchra		Endangered		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa schioetzi		Vulnerable		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa trifasciata	True	Critically Endangered		1			
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa venusta	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus batesi		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus diadematus		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus fallax	True	Vulnerable		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus laurenti	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus montanus		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus nganhanus	True	Critically Endangered		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus occidentalis		Least Concern	1				
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus perreti	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus ranoides	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus rheophilus		Near Threatened		1			
Amphibia	Anura	Arthroleptidae	Astylosternus	Astylosternus schioetzi	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon albiventris	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon axillaris	True	Critically Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon bicolor		Near Threatened		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon boulengeri		Near Threatened		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon bueanus	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon erythrogaster	True	Critically Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon mertensi	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon ornatus	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon ovatus		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon perreti	True	Endangered		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon polyacanthus		Vulnerable		1			
Amphibia	Anura	Arthroleptidae	Leptodactylodon	Leptodactylodon wildi	True	Critically Endangered		1			
Amphibia	Anura	Arthroleptidae	Scotobleps	Scotobleps gabonicus		Least Concern		1			
Amphibia	Anura	Arthroleptidae	Trichobatrachus	Trichobatrachus robustus		Least Concern		1			
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus didactylus	True	Least Concern				1	
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus ephippium	True	Least Concern				1	
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus nodoterga	True	Data Deficient				1	
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus vertebralis	True	Data Deficient				1	
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo olallai	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Ansonia	Ansonia albomaculata		Least Concern			1		
Amphibia	Anura	Bufonidae	Ansonia	Ansonia latidisca		Endangered			1		
Amphibia	Anura	Bufonidae	Ansonia	Ansonia leptopus		Least Concern			1		
Amphibia	Anura	Bufonidae	Ansonia	Ansonia longidigita		Least Concern			1		
Amphibia	Anura	Bufonidae	Ansonia	Ansonia minuta		Least Concern			1		
Amphibia	Anura	Bufonidae	Ansonia	Ansonia spinulifer		Least Concern			1		
Amphibia	Anura	Bufonidae	Atelopus	Atelopus arthuri	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus balios	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus bomolochos	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus boulengeri	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus coynei	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus elegans		Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus ignescens	True	Critically Endangered					1
Amphibia	Anura	Bufonidae	Atelopus	Atelopus palmatus	True	Critically Endangered					1

Amphibia	Anura	Bufonidae	Atelopus	Atelopus spumarius		Vulnerable						1	1
Amphibia	Anura	Bufonidae	Rhinella	Rhinella amabilis	True	Critically Endangered							1
Amphibia	Anura	Bufonidae	Phrynoidis	Phrynoidis asper		Least Concern					1		
Amphibia	Anura	Bufonidae	Rhinella	Rhinella bergi		Least Concern						1	
Amphibia	Anura	Bufonidae	Ingerophrynus	Ingerophrynus biporcatus	True	Least Concern					1		
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo blombergi		Near Threatened							1
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo caeruleostictus	True	Endangered							1
Amphibia	Anura	Bufonidae	Ingerophrynus	Ingerophrynus claviger	True	Least Concern					1		
Amphibia	Anura	Bufonidae	Incilius	Incilius coniferus		Least Concern							1
Amphibia	Anura	Bufonidae	Rhinella	Rhinella crucifer		Least Concern						1	
Amphibia	Anura	Bufonidae	Ingerophrynus	Ingerophrynus divergens		Least Concern					1		
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys djohongensis		Data Deficient			1				
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys gracilipes		Least Concern			1				
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo guttatus		Least Concern						1	1
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo haematiticus		Least Concern							1
Amphibia	Anura	Bufonidae	Phrynoidis	Phrynoidis juxtaspera		Least Concern					1		
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys latifrons		Least Concern			1				
Amphibia	Anura	Bufonidae	Rhinella	Rhinella ocellata	True	Least Concern						1	
Amphibia	Anura	Bufonidae	Ingerophrynus	Ingerophrynus parvus		Least Concern					1		
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys pentoni		Least Concern		1	1				
Amphibia	Anura	Bufonidae	Rhinella	Rhinella proboscidea		Least Concern						1	1
Amphibia	Anura	Bufonidae	Ingerophrynus	Ingerophrynus quadriporcatus		Least Concern					1		
Amphibia	Anura	Bufonidae	Rhinella	Rhinella rubescens	True	Least Concern						1	
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys steindachneri		Least Concern			1				
Amphibia	Anura	Bufonidae	Duttaphrynus	Duttaphrynus sumatranus	True	Data Deficient					1		
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys taiensis		Endangered	1						
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys togoensis		Least Concern	1	1					
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys villiersi	True	Vulnerable			1				
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys xeros		Least Concern			1				
Amphibia	Anura	Bufonidae	Dendrophryniscus	Dendrophryniscus berthalutzae	True	Least Concern						1	
Amphibia	Anura	Bufonidae	Dendrophryniscus	Dendrophryniscus carvalhoi	True	Endangered						1	
Amphibia	Anura	Bufonidae	Dendrophryniscus	Dendrophryniscus leucomystax	True	Least Concern						1	
Amphibia	Anura	Bufonidae	Amazophrynella	Amazophrynella minuta		Least Concern						1	1
Amphibia	Anura	Bufonidae	Didynamipus	Didynamipus sjostedti		Vulnerable			1				
Amphibia	Anura	Bufonidae	Frostius	Frostius pernambucensis	True	Least Concern						1	
Amphibia	Anura	Bufonidae	Melanophryniscus	Melanophryniscus fulvoguttatus		Least Concern						1	
Amphibia	Anura	Bufonidae	Melanophryniscus	Melanophryniscus pachyrhynus	True	Data Deficient						1	
Amphibia	Anura	Bufonidae	Melanophryniscus	Melanophryniscus spectabilis	True	Data Deficient						1	
Amphibia	Anura	Bufonidae	Osornophryne	Osornophryne antisana	True	Endangered							1
Amphibia	Anura	Bufonidae	Osornophryne	Osornophryne bufoniformis		Near Threatened							1
Amphibia	Anura	Bufonidae	Osornophryne	Osornophryne guacamayo		Endangered							1
Amphibia	Anura	Bufonidae	Osornophryne	Osornophryne talipes		Vulnerable							1
Amphibia	Anura	Bufonidae	Rentapia	Rentapia hosii		Least Concern					1		
Amphibia	Anura	Bufonidae	Pseudobufo	Pseudobufo subasper		Least Concern					1		
Amphibia	Anura	Bufonidae	Rhinella	Rhinella festae		Least Concern							1
Amphibia	Anura	Bufonidae	Dendrophryniscus	Dendrophryniscus proboscideus	True	Data Deficient						1	
Amphibia	Anura	Bufonidae	Werneria	Werneria bambutensis	True	Critically Endangered			1				
Amphibia	Anura	Bufonidae	Werneria	Werneria mertensiana		Critically Endangered			1				
Amphibia	Anura	Bufonidae	Werneria	Werneria preussi		Endangered			1				
Amphibia	Anura	Bufonidae	Werneria	Werneria tandyi	True	Critically Endangered			1				
Amphibia	Anura	Bufonidae	Wolterstorffina	Wolterstorffina mirei	True	Endangered			1				
Amphibia	Anura	Bufonidae	Wolterstorffina	Wolterstorffina parvipalmata		Critically Endangered			1				
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene bacatum		Data Deficient							1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene ballux		Endangered							1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene buckleyi		Vulnerable							1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene gemmatum	True	Critically Endangered							1

Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus grandisonae		Least Concern		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene heloderma		Vulnerable		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene huilense		Endangered		1
Amphibia	Anura	Centrolenidae	Cochranella	Cochranella litoralis		Vulnerable		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene lynchi	True	Endangered		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene medemi		Endangered		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene peristictum		Least Concern		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene scirtetes		Endangered		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus anomalus	True	Critically Endangered		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus balionotus		Endangered		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus cariticommatus	True	Data Deficient		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus cochranae	True	Vulnerable		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus griffithsi		Least Concern		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus megacheirus		Endangered		1
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene ocellifera	True	Data Deficient		1
Amphibia	Anura	Centrolenidae	Sachatamia	Sachatamia orejuela		Least Concern		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus posadae		Least Concern		1
Amphibia	Anura	Centrolenidae	Cochranella	Cochranella resplendens		Least Concern		1
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus siren		Vulnerable		1
Amphibia	Anura	Centrolenidae	Teratohyla	Teratohyla spinosa		Least Concern		1
Amphibia	Anura	Centrolenidae	Hyalinobatrachium	Hyalinobatrachium aureoguttatum		Least Concern		1
Amphibia	Anura	Centrolenidae	Vitreorana	Vitreorana parvula	True	Data Deficient	1	
Amphibia	Anura	Centrolenidae	Hyalinobatrachium	Hyalinobatrachium valerioi		Least Concern		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates zaparo		Least Concern		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus anthracinus	True	Critically Endangered		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus awa	True	Least Concern		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus bocagei		Least Concern		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus breviquartus		Least Concern		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates brunneus		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus cevallosi		Endangered		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus delatorreae	True	Critically Endangered		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus elachyhistus		Least Concern		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus exasperatus	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus fallax	True	Data Deficient		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates fratisenescus	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Leucostethus	Leucostethus fugax	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus fuliginosus	True	Data Deficient		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates goianus	True	Data Deficient	1	
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus infraguttatus		Near Threatened		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates insperatus		Least Concern		1
Amphibia	Anura	Dendrobatidae	Colostethus	Colostethus jacobuspetersi	True	Critically Endangered		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates kingsburyi	True	Endangered		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus lehmanni		Near Threatened		1
Amphibia	Anura	Dendrobatidae	Epipedobates	Epipedobates machalilla	True	Least Concern		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates marchesianus		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus marmoreoventris	True	Data Deficient		1
Amphibia	Anura	Aromobatidae	Allobates	Allobates olfersioides	True	Vulnerable	1	
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus peculiaris	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus peruvianus		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus pulchellus		Near Threatened		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus pumilus	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus shuar		Near Threatened		1
Amphibia	Anura	Aromobatidae	Anomaloglossus	Anomaloglossus stepheni	True	Least Concern	1	
Amphibia	Anura	Aromobatidae	Allobates	Allobates talamancae		Least Concern		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus toachi	True	Endangered		1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus vertebralis	True	Critically Endangered		1

Amphibia	Anura	Dendrobatidae	Paruwrobates	Paruwrobates whymperi	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Excidobates	Excidobates captivus		Vulnerable		1
Amphibia	Anura	Dendrobatidae	Adelphobates	Adelphobates castaneoticus	True	Least Concern	1	
Amphibia	Anura	Dendrobatidae	Adelphobates	Adelphobates galactonotus	True	Least Concern	1	
Amphibia	Anura	Dendrobatidae	Dendrobates	Dendrobates leucomelas		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Oophaga	Oophaga sylvatica		Near Threatened		1
Amphibia	Anura	Dendrobatidae	Ranitomeya	Ranitomeya vanzolinii		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Ranitomeya	Ranitomeya ventrimaculata		Least Concern	1	1
Amphibia	Anura	Dendrobatidae	Epipedobates	Epipedobates anthonyi		Near Threatened		1
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega bilinguis		Least Concern		1
Amphibia	Anura	Dendrobatidae	Epipedobates	Epipedobates boulengeri		Least Concern		1
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega braccata	True	Least Concern	1	
Amphibia	Anura	Dendrobatidae	Paruwrobates	Paruwrobates erythromos	True	Data Deficient		1
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega flavopicta		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega hahneli		Least Concern	1	1
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega macero		Least Concern	1	
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega parvula		Least Concern		1
Amphibia	Anura	Dendrobatidae	Epipedobates	Epipedobates tricolor	True	Vulnerable		1
Amphibia	Anura	Dendrobatidae	Ameerega	Ameerega trivittata		Least Concern	1	
Amphibia	Anura	Hylidae	Aparasphenodon	Aparasphenodon brunoi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Corythomantis	Corythomantis greeningi	True	Least Concern	1	
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca andaquiensis		Least Concern		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca cornuta		Endangered		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca dendronastes		Endangered		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca espeletia		Endangered		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca fissipes	True	Least Concern	1	
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca lateonota		Vulnerable		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca orophylax		Vulnerable		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca plumbea	True	Vulnerable		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca pseustes	True	Near Threatened		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca testudinea		Least Concern		1
Amphibia	Anura	Hemiphractidae	Gastrotheca	Gastrotheca weinlandii		Least Concern		1
Amphibia	Anura	Hemiphractidae	Hemiphractus	Hemiphractus bubalus		Near Threatened		1
Amphibia	Anura	Hemiphractidae	Hemiphractus	Hemiphractus fasciatus		Near Threatened		1
Amphibia	Anura	Hylidae	Aplastodiscus	Aplastodiscus albofrenatus	True	Least Concern	1	
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus alboguttatus	True	Least Concern		1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus albopunctulatus		Least Concern		1
Amphibia	Anura	Hylidae	Aplastodiscus	Aplastodiscus albosignatus	True	Least Concern	1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus alytolylax		Near Threatened		1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus araguaya	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Boana	Boana atlantica	True	Least Concern	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus berthalutzae	True	Least Concern	1	
Amphibia	Anura	Hylidae	Boana	Boana bischoffi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus brevifrons		Least Concern	1	1
Amphibia	Anura	Hylidae	Boana	Boana buriti	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus cachimbo	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Boana	Boana caingua		Least Concern	1	
Amphibia	Anura	Hylidae	Boana	Boana calcarata		Least Concern	1	1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus cerradensis	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Boana	Boana claresignata	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus cruzi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus dutrai	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus ebraccatus		Least Concern		1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus elianeae		Least Concern	1	
Amphibia	Anura	Hylidae	Boana	Boana faber		Least Concern	1	
Amphibia	Anura	Hylidae	Boana	Boana goiana	True	Least Concern	1	

Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus gryllatus	True	Endangered			1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus haraldschultzi		Least Concern		1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla hylax	True	Least Concern		1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla ibitiguara	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus lindae		Least Concern			1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus marmoratus		Least Concern		1	1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus miyatai		Least Concern		1	1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus novaisi	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus oliveirai	True	Least Concern		1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus pacha	True	Data Deficient			1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus palmeri		Least Concern			1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus pantostictus		Critically Endangered			1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus phyllognathus		Least Concern			1
Amphibia	Anura	Hylidae	Boana	Boana picturata		Least Concern			1
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla pseudopseudis	True	Least Concern		1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus ptychodactylus	True	Endangered			1
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla ravida	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus rubicundulus		Least Concern		1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus ruschii	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla saxicola	True	Least Concern		1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla sazimai	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus seniculus	True	Least Concern		1	
Amphibia	Anura	Hylidae	Aplastodiscus	Aplastodiscus sibilatus	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus soaresi	True	Least Concern		1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus staufferorum	True	Endangered			1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus tapichalaca	True	Data Deficient			1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus torrenticola		Vulnerable			1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus tritaeniatus		Least Concern		1	
Amphibia	Anura	Hylidae	Aplastodiscus	Aplastodiscus weygoldti	True	Near Threatened		1	
Amphibia	Anura	Phyllomedusidae	Agalychnis	Agalychnis granulosa	True	Least Concern		1	
Amphibia	Anura	Pelodryadidae	Litoria	Litoria aruensis	True	Data Deficient	1		
Amphibia	Anura	Pelodryadidae	Litoria	Litoria havina		Least Concern	1		
Amphibia	Anura	Pelodryadidae	Litoria	Litoria pratti	True	Data Deficient	1		
Amphibia	Anura	Hylidae	Lysapsus	Lysapsus limellum		Least Concern		1	
Amphibia	Anura	Hylidae	Nyctimantis	Nyctimantis rugiceps		Least Concern			1
Amphibia	Anura	Pelodryadidae	Litoria	Litoria rueppelli	True	Vulnerable	1		
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus buckleyi		Least Concern		1	1
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus cabrerai		Least Concern		1	1
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus deridens		Least Concern			1
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus fuscifacies		Least Concern			1
Amphibia	Anura	Hylidae	Dryaderces	Dryaderces pearsoni		Least Concern		1	
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus planiceps		Least Concern			1
Amphibia	Anura	Hylidae	Osteocephalus	Osteocephalus yasuni		Least Concern			1
Amphibia	Anura	Phyllomedusidae	Phasmahyla	Phasmahyla exilis	True	Least Concern		1	
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus coriaceus		Least Concern		1	1
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus imitatrix		Least Concern		1	
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus lepidus	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus resinifictrix		Least Concern		1	1
Amphibia	Anura	Phyllomedusidae	Phrynomedusa	Phrynomedusa marginata	True	Least Concern		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes acuminatus	True	Least Concern		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes brevirostris	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes edelmoi	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes gyrinaethes	True	Data Deficient		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes kautskyi	True	Least Concern		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes luteolus	True	Least Concern		1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes melanomystax	True	Least Concern		1	

Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes tuberculosus	True	Data Deficient	1	
Amphibia	Anura	Phyllomedusidae	Callimedusa	Callimedusa atelopoides		Least Concern	1	
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa boliviana		Least Concern	1	
Amphibia	Anura	Phyllomedusidae	Agalychnis	Agalychnis buckleyi		Least Concern		1
Amphibia	Anura	Phyllomedusidae	Pithecopus	Pithecopus centralis	True	Data Deficient	1	
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa coelestis		Least Concern		1
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa distincta	True	Least Concern	1	
Amphibia	Anura	Phyllomedusidae	Agalychnis	Agalychnis hulli		Least Concern		1
Amphibia	Anura	Phyllomedusidae	Pithecopus	Pithecopus palliatus		Least Concern	1	1
Amphibia	Anura	Phyllomedusidae	Callimedusa	Callimedusa perinesos		Endangered		1
Amphibia	Anura	Phyllomedusidae	Agalychnis	Agalychnis psilopygion		Least Concern		1
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa sauvagii		Least Concern	1	
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa tarsius		Least Concern	1	1
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa tetraploidea		Least Concern	1	
Amphibia	Anura	Phyllomedusidae	Callimedusa	Callimedusa tomopterna		Least Concern	1	1
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa vaillantii		Least Concern	1	1
Amphibia	Anura	Hylidae	Pseudis	Pseudis bolbodactyla	True	Least Concern	1	
Amphibia	Anura	Hylidae	Pseudis	Pseudis fusca	True	Least Concern	1	
Amphibia	Anura	Hylidae	Pseudis	Pseudis tocantins	True	Least Concern	1	
Amphibia	Anura	Hylidae	Scarthyla	Scarthyla goinorum		Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax acuminatus		Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon agilis	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon albicans	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon arduous	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon argyreornata	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon berthae		Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax boesemani		Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax caldarum	True	Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax cardosoi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon carnevallii	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon catharinae	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon centralis	True	Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax cuspidatus	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon flavoguttata	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon heyeri	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon hiemalis	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon humilis	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon kautskyi	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Scinax	Scinax lindsayi		Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon luizotavioi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon machadoi	True	Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax maracaya	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Scinax	Scinax nebulosus		Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon obtriangulata	True	Least Concern	1	
Amphibia	Anura	Hylidae	Scinax	Scinax pachycrus	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon perpusilla	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon rizibilis	True	Least Concern	1	
Amphibia	Anura	Hylidae	Ololygon	Ololygon trapicheiroi	True	Near Threatened	1	
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus bromelicola	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus carneus		Least Concern	1	1
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus dorisae		Least Concern	1	1
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus palustris	True	Least Concern	1	
Amphibia	Anura	Hylidae	Gabohyla	Gabohyla pauloalvini	True	Data Deficient	1	
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus planicola	True	Least Concern	1	
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus prasinus	True	Least Concern	1	
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus atlas	True	Least Concern	1	

Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus jordani		Least Concern						1
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus nigromaculatus	True	Least Concern					1	
Amphibia	Anura	Hyperoliidae	Acanthixalus	Acanthixalus sonjae		Vulnerable	1	1				
Amphibia	Anura	Hyperoliidae	Afrixalus	Afrixalus equatorialis		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Afrixalus	Afrixalus lacteus	True	Endangered			1			
Amphibia	Anura	Hyperoliidae	Afrixalus	Afrixalus laevis		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Afrixalus	Afrixalus nigeriensis		Least Concern	1	1				
Amphibia	Anura	Hyperoliidae	Afrixalus	Afrixalus vibekensis		Least Concern	1	1				
Amphibia	Anura	Hyperoliidae	Alexteroon	Alexteroon hypsiphonus		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Alexteroon	Alexteroon jynx	True	Critically Endangered			1			
Amphibia	Anura	Hyperoliidae	Alexteroon	Alexteroon obstetricans		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Arlequinus	Arlequinus krebsi		Endangered			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius koehleri		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius acutirostris	True	Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius ademetzi	True	Endangered			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius bobirensis	True	Vulnerable		1				
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius bopeleti	True	Vulnerable			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius chlorosteus		Least Concern	1					
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius endjami	True	Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius fusciventris		Least Concern	1	1	1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius guttulatus		Least Concern	1	1	1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius laurenti		Near Threatened	1	1				
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius mosaicus		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius nienokouensis	True	Endangered	1					
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius nimbae		Endangered	1					
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius picturatus		Least Concern	1	1				
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius riggenbachi		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius sylvaticus		Least Concern	1	1	1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius torrentis		Vulnerable		1				
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius tuberculatus		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius viridigulosus		Near Threatened	1	1				
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius zonatus		Least Concern	1					
Amphibia	Anura	Hyperoliidae	Kassina	Kassina arboricola		Vulnerable	1	1				
Amphibia	Anura	Hyperoliidae	Kassina	Kassina cochranae		Least Concern	1					
Amphibia	Anura	Hyperoliidae	Kassina	Kassina lamottei		Least Concern	1					
Amphibia	Anura	Hyperoliidae	Kassina	Kassina schioetzi		Least Concern	1					
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis boulengeri		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis brevirostris		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis calcaratus		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis macrotis		Near Threatened	1	1				
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis millsoni		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis occidentalis		Near Threatened	1	1				
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis ocellatus		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis aubryioides		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis rufus		Least Concern			1			
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis zebra		Least Concern			1			
Amphibia	Anura	Hyperoliidae	Opisthothylax	Opisthothylax immaculatus		Least Concern			1			
Amphibia	Anura	Eleutherodactylidae	Adelophryne	Adelophryne baturitensis	True	Vulnerable					1	
Amphibia	Anura	Eleutherodactylidae	Adelophryne	Adelophryne maranguapensis	True	Endangered					1	
Amphibia	Anura	Eleutherodactylidae	Adelophryne	Adelophryne pachydactyla	True	Data Deficient					1	
Amphibia	Anura	Leptodactylidae	Adenomera	Adenomera bokermanni	True	Least Concern					1	
Amphibia	Anura	Leptodactylidae	Adenomera	Adenomera marmorata	True	Least Concern					1	
Amphibia	Anura	Craugastoridae	Barycholos	Barycholos ternetzi	True	Least Concern					1	
Amphibia	Anura	Ceratophryidae	Ceratophrys	Ceratophrys aurita	True	Least Concern					1	
Amphibia	Anura	Ceratophryidae	Ceratophrys	Ceratophrys joazeirensis	True	Data Deficient					1	
Amphibia	Anura	Ceratophryidae	Ceratophrys	Ceratophrys ornata		Near Threatened					1	

Amphibia	Anura	Ceratophryidae	Ceratophrys	Ceratophrys stolzmanni		Vulnerable		1
Amphibia	Anura	Leptodactylidae	Crossodactylodes	Crossodactylodes bokermanni	True	Near Threatened	1	
Amphibia	Anura	Leptodactylidae	Crossodactylodes	Crossodactylodes izecksohni	True	Near Threatened	1	
Amphibia	Anura	Hylodidae	Crossodactylus	Crossodactylus dantei	True	Data Deficient	1	
Amphibia	Anura	Hylodidae	Crossodactylus	Crossodactylus lutzorum	True	Data Deficient	1	
Amphibia	Anura	Cycloramphidae	Cycloramphus	Cycloramphus fuliginosus	True	Least Concern	1	
Amphibia	Anura	Cycloramphidae	Cycloramphus	Cycloramphus lutzorum	True	Data Deficient	1	
Amphibia	Anura	Cycloramphidae	Cycloramphus	Cycloramphus migueli	True	Data Deficient	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis acerus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Strabomantis	Strabomantis anatipes		Vulnerable		1
Amphibia	Anura	Craugastoridae	Strabomantis	Strabomantis anomalus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis apiculatus		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis appendiculatus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis atratus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Niceforonia	Niceforonia babax		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis balionotus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis baryecuus	True	Endangered		1
Amphibia	Anura	Eleutherodactylidae	Eleutherodactylus	Eleutherodactylus bilineatus	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Haddadus	Haddadus binotatus	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis bromeliaceus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis buckleyi		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis cajamarcensis		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis caprifer		Critically Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis celator		Vulnerable		1
Amphibia	Anura	Craugastoridae	Strabomantis	Strabomantis cerastes		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis chalceus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis chloronotus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis colodactylus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis colomai		Vulnerable		1
Amphibia	Anura	Craugastoridae	Strabomantis	Strabomantis cornutus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis cremnobates	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis crenunguis	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis crucifer	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis cryophilius	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis curtipes		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis degener		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis devillei	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis dissimulatus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Niceforonia	Niceforonia dolops		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis duellmani		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis dundeei		Data Deficient	1	
Amphibia	Anura	Craugastoridae	Niceforonia	Niceforonia elassodiscus		Near Threatened		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema epipeda	True	Near Threatened	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis eremitus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis eriphus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis esmeraldas		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis exoristus		Data Deficient		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis floridus	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis galdi		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ganonotus	True	Data Deficient		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis gentryi	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis gladiator		Vulnerable		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema guentheri		Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis hamiotae	True	Critically Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis hectus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Strabomantis	Strabomantis helonotus	True	Critically Endangered		1

Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ignicolor	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis illotus		Near Threatened		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis incanus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis inusitatus		Vulnerable		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema juipoca	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis labiosus		Least Concern		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema lactea	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis laticlavius		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis latidiscus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis leoni		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis leucopus		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis librarius	True	Data Deficient		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis lividus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis loustes		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis metabates		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis modipeplus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis muricatus	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis muscosus		Near Threatened		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema nasuta	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis nigrogriseus	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis nyctophylax	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ocellatus		Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ocreatus		Endangered		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema oea	True	Near Threatened	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis orestes	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ornatissimus	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis orphnolaimus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis parvillus		Least Concern		1
Amphibia	Anura	Brachycephalidae	Ischnocnema	Ischnocnema parva	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis pastazensis	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis paulodutrai	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis paululus	True	Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis percultus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis petersi		Near Threatened		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis pseudoacuminatus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis pteridophilus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis pycnodermis	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis quinquagesimus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ramagii	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis rhodostichus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis riveti	True	Near Threatened		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis rosadoi		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis rubicundus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis scolodiscus		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis simonbolivari	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis subsigillatus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis supernatis		Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis surdus	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis tenebrionis	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis thymalopsoides	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis toftae		Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis trachyblepharis		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis festae	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis truebae	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis ventrimarmoratus		Least Concern		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis verecundus		Near Threatened		1

Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis vertebralis	True	Vulnerable		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis vidua	True	Endangered		1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis vinhai	True	Least Concern	1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis walkeri	True	Least Concern		1
Amphibia	Anura	Craugastoridae	Euparkerella	Euparkerella robusta	True	Vulnerable	1	
Amphibia	Anura	Craugastoridae	Euparkerella	Euparkerella tridactyla	True	Vulnerable	1	
Amphibia	Anura	Hylodidae	Hylodes	Hylodes heyeri	True	Data Deficient	1	
Amphibia	Anura	Hylodidae	Hylodes	Hylodes lateristrigatus	True	Least Concern	1	
Amphibia	Anura	Hylodidae	Hylodes	Hylodes meridionalis	True	Least Concern	1	
Amphibia	Anura	Hylodidae	Hylodes	Hylodes perplicatus	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus flavopictus	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus furnarius		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus hylodes	True	Data Deficient	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus leptodactyloides		Least Concern	1	1
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus notoaktites	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus latrans		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus spixi	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus stenodema		Least Concern	1	1
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus syphax		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus troglodytes	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus viridis	True	Data Deficient	1	
Amphibia	Anura	Hylodidae	Megaelosia	Megaelosia apuana	True	Data Deficient	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys salvatori	True	Data Deficient	1	
Amphibia	Anura	Craugastoridae	Niceforonia	Niceforonia brunnea		Endangered		1
Amphibia	Anura	Craugastoridae	Lynchius	Lynchius flavomaculatus		Data Deficient		1
Amphibia	Anura	Craugastoridae	Niceforonia	Niceforonia peraccai	True	Data Deficient		1
Amphibia	Anura	Craugastoridae	Noblella	Noblella heyeri		Least Concern		1
Amphibia	Anura	Craugastoridae	Noblella	Noblella myrmecoides		Least Concern	1	1
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus aguirrei	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus caete	True	Data Deficient	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus centralis		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus cicada	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus crombiei	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus marmoratus		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus henselii		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus kroyeri	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus lisei	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus maculiventris	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus nanus	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus nattereri		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus obtectus	True	Data Deficient	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus olfersii	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Engystomops	Engystomops petersi		Least Concern		1
Amphibia	Anura	Leptodactylidae	Engystomops	Engystomops pustulatus		Least Concern		1
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus signifer	True	Least Concern	1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus soaresi	True	Endangered	1	
Amphibia	Anura	Eleutherodactylidae	Phyzelaphryne	Phyzelaphryne miriamae		Least Concern	1	
Amphibia	Anura	Leptodactylidae	Pleurodema	Pleurodema bibroni		Near Threatened	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys appendiculata	True	Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys avelinoi		Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys bigibbosa		Near Threatened	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys boiei	True	Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys brauni	True	Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys cristiceps	True	Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys goyana	True	Least Concern	1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys laticeps	True	Least Concern	1	

Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys moehringi	True	Data Deficient			1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys phyllostomus	True	Data Deficient			1	
Amphibia	Anura	Odontophrynidae	Proceratophrys	Proceratophrys schirchi	True	Least Concern			1	
Amphibia	Anura	Leptodactylidae	Pseudopaludicola	Pseudopaludicola ceratophyes		Least Concern			1	
Amphibia	Anura	Leptodactylidae	Pseudopaludicola	Pseudopaludicola mystacalis		Least Concern			1	
Amphibia	Anura	Leptodactylidae	Pseudopaludicola	Pseudopaludicola saltica	True	Least Concern			1	
Amphibia	Anura	Leptodactylidae	Pseudopaludicola	Pseudopaludicola ternetzi	True	Least Concern			1	
Amphibia	Anura	Leptodactylidae	Rupirana	Rupirana cardosoi	True	Near Threatened			1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus discodactylus		Least Concern			1	1
Amphibia	Anura	Cycloramphidae	Zachaenus	Zachaenus carvalhoi	True	Data Deficient			1	
Amphibia	Anura	Megophryidae	Leptobrachium	Leptobrachium montanum		Least Concern		1		
Amphibia	Anura	Megophryidae	Leptobrachella	Leptobrachella picta		Least Concern		1		
Amphibia	Anura	Megophryidae	Megophrys	Megophrys montana	True	Least Concern		1		
Amphibia	Anura	Megophryidae	Megophrys	Megophrys nasuta		Least Concern		1		
Amphibia	Anura	Microhylidae	Arcovomer	Arcovomer passarellii	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Glyphoglossus	Glyphoglossus volzi	True	Least Concern		1		
Amphibia	Anura	Microhylidae	Callulops	Callulops fuscus	True	Data Deficient		1		
Amphibia	Anura	Microhylidae	Chaperina	Chaperina fusca		Least Concern		1		
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis alagoana	True	Data Deficient			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis anatipes		Least Concern				1
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis capixaba	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis lacrimae	True	Endangered			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis centralis	True	Data Deficient			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis cordeiroi	True	Data Deficient			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis crucis	True	Data Deficient			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis leucosticta	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis mehelyi	True	Data Deficient			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis schubarti	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Cophixalus	Cophixalus balbus		Least Concern		1		
Amphibia	Anura	Microhylidae	Cophixalus	Cophixalus tetzlaffi	True	Data Deficient		1		
Amphibia	Anura	Microhylidae	Dasypops	Dasypops schirchi	True	Vulnerable			1	
Amphibia	Anura	Microhylidae	Dermatonotus	Dermatonotus muelleri		Least Concern			1	
Amphibia	Anura	Microhylidae	Kalophrynus	Kalophrynus heterochirus		Least Concern		1		
Amphibia	Anura	Microhylidae	Kalophrynus	Kalophrynus intermedius		Least Concern		1		
Amphibia	Anura	Microhylidae	Kalophrynus	Kalophrynus minusculus	True	Least Concern		1		
Amphibia	Anura	Microhylidae	Kalophrynus	Kalophrynus pleurostigma		Least Concern		1		
Amphibia	Anura	Microhylidae	Kalophrynus	Kalophrynus subterrestris		Least Concern		1		
Amphibia	Anura	Microhylidae	Metaphrynella	Metaphrynella sundana		Least Concern		1		
Amphibia	Anura	Microhylidae	Microhyla	Microhyla palmipes		Least Concern		1		
Amphibia	Anura	Microhylidae	Nanohyla	Nanohyla perparva		Least Concern		1		
Amphibia	Anura	Microhylidae	Nanohyla	Nanohyla petrigena		Least Concern		1		
Amphibia	Anura	Microhylidae	Micryletta	Micryletta inornata		Least Concern		1		
Amphibia	Anura	Microhylidae	Myersiella	Myersiella microps	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Ctenophryne	Ctenophryne aterrima		Least Concern				1
Amphibia	Anura	Microhylidae	Oreophryne	Oreophryne celebensis	True	Vulnerable		1		
Amphibia	Anura	Microhylidae	Oreophryne	Oreophryne variabilis	True	Vulnerable		1		
Amphibia	Anura	Microhylidae	Oreophryne	Oreophryne zimmeri	True	Endangered		1		
Amphibia	Anura	Microhylidae	Otophryne	Otophryne pyburni		Least Concern			1	
Amphibia	Anura	Microhylidae	Stereocyclops	Stereocyclops incrassatus	True	Least Concern			1	
Amphibia	Anura	Microhylidae	Synapturanus	Synapturanus rabus		Least Concern				1
Amphibia	Anura	Microhylidae	Synapturanus	Synapturanus salseri		Least Concern			1	
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis antenori		Least Concern			1	1
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis tridactyla		Least Concern			1	
Amphibia	Anura	Microhylidae	Xenorhina	Xenorhina anorbis		Data Deficient		1		
Amphibia	Anura	Microhylidae	Xenorhina	Xenorhina ophiodon	True	Data Deficient		1		
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus africanus		Least Concern	1			

Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes cameronensis		Least Concern			1					
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes johnstoni		Least Concern			1					
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes newtonii		Vulnerable			1					
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes palmipes		Vulnerable			1					
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes perreti	True	Critically Endangered			1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus alleni		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus annulatus		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus auritus		Least Concern			1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus batesii		Least Concern		1	1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus calcaratus		Least Concern	1	1	1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus cornutus		Least Concern			1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus cricogaster		Near Threatened			1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus fraterculus		Least Concern	1							
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus ghanensis		Near Threatened	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus guineensis		Least Concern	1							
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus gutturosus		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus liberiensis		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus phyllophilus		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus plicatus		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus tokba		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus villiersi		Least Concern	1	1						
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus sandersoni		Least Concern			1					
Amphibia	Anura	Pipidae	Hymenochirus	Hymenochirus boettgeri		Least Concern			1					
Amphibia	Anura	Pipidae	Pipa	Pipa carvalhoi	True	Least Concern					1			
Amphibia	Anura	Pipidae	Pipa	Pipa pipa		Least Concern					1	1		
Amphibia	Anura	Pipidae	Xenopus	Xenopus epitropicalis		Least Concern			1					
Amphibia	Anura	Pipidae	Xenopus	Xenopus amieti	True	Vulnerable			1					
Amphibia	Anura	Pipidae	Xenopus	Xenopus boumbaensis		Near Threatened			1					
Amphibia	Anura	Ranidae	Amnirana	Amnirana amnicola		Least Concern			1					
Amphibia	Anura	Ranidae	Amnirana	Amnirana asperrima		Vulnerable			1					
Amphibia	Anura	Ranidae	Amnirana	Amnirana longipes	True	Least Concern			1					
Amphibia	Anura	Ranidae	Amnirana	Amnirana occidentalis		Least Concern	1	1						
Amphibia	Anura	Pyxicephalidae	Aubria	Aubria occidentalis		Least Concern	1	1	1					
Amphibia	Anura	Conrauidae	Conraua	Conraua alleni		Least Concern	1							
Amphibia	Anura	Conrauidae	Conraua	Conraua crassipes		Least Concern			1					
Amphibia	Anura	Conrauidae	Conraua	Conraua derooi		Critically Endangered		1						
Amphibia	Anura	Conrauidae	Conraua	Conraua robusta		Vulnerable			1					
Amphibia	Anura	Ranidae	Bijurana	Bijurana nicobariensis		Least Concern				1				
Amphibia	Anura	Ranidae	Huia	Huia cavitympanum		Least Concern				1				
Amphibia	Anura	Ranidae	Wijayarana	Wijayarana masonii	True	Least Concern				1				
Amphibia	Anura	Ranidae	Wijayarana	Wijayarana modiglianii	True	Least Concern				1				
Amphibia	Anura	Ranidae	Wijayarana	Wijayarana sumatrana	True	Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes arathooni	True	Vulnerable				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes asperatus	True	Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes blythii		Near Threatened				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes finchi		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes heinrichi	True	Vulnerable				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes ibanorum		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes ingeri		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes kenepaiensis		Vulnerable				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes kuhlii		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes laticeps		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes leporinus		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes macrodon	True	Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes malesianus		Near Threatened				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes microdiscus	True	Least Concern				1				

Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes microtympanum	True	Endangered				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes modestus	True	Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes palavanensis		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes paramacrodon		Near Threatened				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes rhacodus		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes shompenorum		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes tweediei		Least Concern				1				
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys kinabaluensis		Least Concern				1				
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys orphnocnemis		Least Concern				1				
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys phaeomerus		Least Concern				1				
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys poecilus		Least Concern				1				
Amphibia	Anura	Dicroglossidae	Occidozyga	Occidozyga semipalmata	True	Least Concern				1				
Amphibia	Anura	Ptychadenidae	Ptychadena	Ptychadena aequiplicata		Least Concern	1	1	1					
Amphibia	Anura	Ptychadenidae	Ptychadena	Ptychadena longirostris		Least Concern	1	1						
Amphibia	Anura	Ptychadenidae	Ptychadena	Ptychadena perreti		Least Concern			1					
Amphibia	Anura	Ptychadenidae	Ptychadena	Ptychadena superciliaris		Least Concern	1	1						
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana baramica		Least Concern				1				
Amphibia	Anura	Ranidae	Lithobates	Lithobates bwana		Least Concern								1
Amphibia	Anura	Ranidae	Hylarana	Hylarana celebensis	True	Least Concern				1				
Amphibia	Anura	Ranidae	Papurana	Papurana garritor		Least Concern				1				
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana glandulosa		Least Concern				1				
Amphibia	Anura	Ranidae	Odorrana	Odorrana hosii		Least Concern				1				
Amphibia	Anura	Ranidae	Chalcorana	Chalcorana kampeni	True	Least Concern				1				
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana laterimaculata		Least Concern				1				
Amphibia	Anura	Ranidae	Chalcorana	Chalcorana macrops	True	Vulnerable				1				
Amphibia	Anura	Ranidae	Sylvirana	Sylvirana nigrovittata		Least Concern				1				
Amphibia	Anura	Ranidae	Lithobates	Lithobates palmipes		Least Concern						1		1
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana picturata		Least Concern				1				
Amphibia	Anura	Ranidae	Sanguirana	Sanguirana sanguinea		Least Concern				1				
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana signata		Least Concern				1				
Amphibia	Anura	Ranidae	Staurois	Staurois latopalmatus		Least Concern				1				
Amphibia	Anura	Ranidae	Staurois	Staurois tuberilinguis		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Nyctixalus	Nyctixalus margaritifer	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Nyctixalus	Nyctixalus pictus		Near Threatened				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus aurifasciatus	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus cornutus	True	Endangered				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus hosii		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus petersi		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus similis	True	Data Deficient				1				
Amphibia	Anura	Rhacophoridae	Philautus	Philautus vittiger	True	Near Threatened				1				
Amphibia	Anura	Rhacophoridae	Zhangixalus	Zhangixalus achantharrhena	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Kurixalus	Kurixalus appendiculatus		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus barisani	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus bifasciatus	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus cyanopunctatus		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Zhangixalus	Zhangixalus dulitensis		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus edentulus	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus georgii	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus harrissoni		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Feihyla	Feihyla kajau		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus margaritifer	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus modestus	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus monticola	True	Vulnerable				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus nigropalmatus		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus poecilonotus	True	Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus reinwardtii		Near Threatened				1				

Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus rufipes		Least Concern		1		
Amphibia	Anura	Rhacophoridae	Theloderma	Theloderma leporosum		Least Concern		1		
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa altamazonica		Least Concern			1	1
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa biseriata		Least Concern				1
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa equatoriana		Least Concern				1
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa palmata		Least Concern				1
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa sima		Least Concern				1
Amphibia	Caudata	Plethodontidae	Oedipina	Oedipina complex		Least Concern				1
Amphibia	Gymnophiona	Caeciliidae	Caecilia	Caecilia guntheri		Least Concern				1
Amphibia	Gymnophiona	Caeciliidae	Caecilia	Caecilia leucocephala		Least Concern				1
Amphibia	Gymnophiona	Caeciliidae	Caecilia	Caecilia nigricans		Least Concern				1
Amphibia	Gymnophiona	Caeciliidae	Caecilia	Caecilia pachynema		Least Concern				1
Amphibia	Gymnophiona	Caeciliidae	Caecilia	Caecilia tenuissima		Data Deficient				1
Amphibia	Gymnophiona	Ichthyophiidae	Ichthyophis	Ichthyophis billitonensis	True	Data Deficient		1		
Amphibia	Gymnophiona	Ichthyophiidae	Ichthyophis	Ichthyophis elongatus	True	Data Deficient		1		
Amphibia	Gymnophiona	Ichthyophiidae	Ichthyophis	Ichthyophis monochrous		Data Deficient		1		
Amphibia	Gymnophiona	Ichthyophiidae	Ichthyophis	Ichthyophis sumatranus	True	Data Deficient		1		
Amphibia	Gymnophiona	Rhinatrematidae	Epicrionops	Epicrionops bicolor		Least Concern				1
Amphibia	Gymnophiona	Rhinatrematidae	Epicrionops	Epicrionops petersi		Least Concern				1
Amphibia	Gymnophiona	Scolecomorphidae	Crotaphatrema	Crotaphatrema bornmuelleri	True	Data Deficient	1			
Amphibia	Gymnophiona	Scolecomorphidae	Crotaphatrema	Crotaphatrema lamottei	True	Critically Endangered	1			
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis adelphus		Least Concern	1			
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus brunneus	True	Data Deficient			1	
Amphibia	Anura	Brachycephalidae	Brachycephalus	Brachycephalus izecksohni	True	Data Deficient			1	
Amphibia	Anura	Bufonidae	Rhinella	Rhinella abei	True	Least Concern			1	
Amphibia	Anura	Bufonidae	Rhinella	Rhinella henseli	True	Least Concern			1	
Amphibia	Anura	Bufonidae	Rhinella	Rhinella ornata		Least Concern			1	
Amphibia	Anura	Bufonidae	Rhinella	Rhinella pombali	True	Least Concern			1	
Amphibia	Anura	Bufonidae	Werneria	Werneria submontana	True	Endangered	1			
Amphibia	Anura	Centrolenidae	Cochranella	Cochranella mache		Near Threatened				1
Amphibia	Anura	Hylidae	Aplastodiscus	Aplastodiscus eugenioi	True	Near Threatened			1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla ahenea	True	Data Deficient			1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla caramaschii	True	Least Concern			1	
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla feioi	True	Data Deficient			1	
Amphibia	Anura	Hylidae	Boana	Boana beckeri	True	Data Deficient			1	
Amphibia	Anura	Hylidae	Boana	Boana latistriata	True	Data Deficient			1	
Amphibia	Anura	Hylidae	Boana	Boana pombali	True	Least Concern			1	
Amphibia	Anura	Hylidae	Phyllodytes	Phyllodytes wuchereri	True	Data Deficient			1	
Amphibia	Anura	Hylidae	Scinax	Scinax constrictus	True	Least Concern			1	
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius dintelmanni	True	Endangered	1			
Amphibia	Anura	Cycloramphidae	Cycloramphus	Cycloramphus acangatan	True	Vulnerable			1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis huicundo		Data Deficient				1
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus erikae	True	Least Concern			1	
Amphibia	Anura	Leptodactylidae	Engystomops	Engystomops guayaco	True	Data Deficient				1
Amphibia	Anura	Megophryidae	Megophrys	Megophrys parallela	True	Least Concern		1		
Amphibia	Anura	Microhylidae	Chiasmocleis	Chiasmocleis gnoma	True	Data Deficient			1	
Amphibia	Caudata	Plethodontidae	Bolitoglossa	Bolitoglossa paraensis	True	Data Deficient			1	
Amphibia	Anura	Centrolenidae	Espadarana	Espadarana callistomma		Least Concern				1
Amphibia	Anura	Pelodryadidae	Litoria	Litoria biakensis	True	Data Deficient		1		
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus buenaventura	True	Data Deficient				1
Amphibia	Anura	Centrolenidae	Teratohyla	Teratohyla amelie		Least Concern				1
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa bahiana	True	Data Deficient			1	
Amphibia	Anura	Bufonidae	Rhinella	Rhinella veredas	True	Least Concern			1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis colonensis		Vulnerable				1
Amphibia	Anura	Centrolenidae	Espadarana	Espadarana durrellorum	True	Least Concern				1
Amphibia	Anura	Hyperoliidae	Kassina	Kassina decorata	True	Vulnerable	1			

Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus wileyi	True	Data Deficient						1
Amphibia	Anura	Hylidae	Bokermannohyla	Bokermannohyla vulcaniae	True	Vulnerable					1	
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis nlonakoensis	True	Endangered		1				
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus laurae	True	Critically Endangered						1
Amphibia	Anura	Dendrobatidae	Ranitomeya	Ranitomeya uakarii		Least Concern					1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus rhodomerus		Least Concern						1
Amphibia	Anura	Bufonidae	Rhinella	Rhinella martyi		Least Concern					1	
Amphibia	Anura	Leptodactylidae	Leptodactylus	Leptodactylus peritoaktites	True	Vulnerable						1
Amphibia	Anura	Microhylidae	Microhyla	Microhyla mantheyi		Least Concern			1			
Amphibia	Anura	Phyllomedusidae	Phyllomedusa	Phyllomedusa araguari	True	Data Deficient					1	
Amphibia	Anura	Pelodryadidae	Litoria	Litoria richardsi		Least Concern			1			
Amphibia	Anura	Hylidae	Boana	Boana nympha		Least Concern						1
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros orbiculus		Vulnerable			1			
Mammalia	Chiroptera	Molossidae	Austronomus	Austronomus kuboriensis		Least Concern			1			
Mammalia	Primates	Cercopithecidae	Chlorocebus	Chlorocebus tantalus		Least Concern	1	1				
Mammalia	Primates	Galagidae	Sciurocheirus	Sciurocheirus gabonensis		Least Concern		1				
Mammalia	Diprotodontia	Phalangeridae	Ailurops	Ailurops melanotis	True	Critically Endangered			1			
Mammalia	Chiroptera	Phyllostomidae	Platyrrhinus	Platyrrhinus ismaeli		Near Threatened						1
Mammalia	Rodentia	Cricetidae	Neusticomys	Neusticomys ferreirai	True	Data Deficient					1	
Mammalia	Didelphimorphia	Didelphidae	Marmosa	Marmosa phaea		Vulnerable						1
Mammalia	Primates	Cebidae	Sapajus	Sapajus flavius	True	Endangered					1	
Mammalia	Rodentia	Sciuridae	Hylopetes	Hylopetes platyurus		Data Deficient			1			
Mammalia	Primates	Callitrichidae	Mico	Mico melanurus		Near Threatened					1	
Mammalia	Cetartiodactyla	Tragulidae	Tragulus	Tragulus kanchil		Least Concern			1			
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius lariang	True	Data Deficient			1			
Mammalia	Chiroptera	Phyllostomidae	Xeronycteris	Xeronycteris vieirai	True	Data Deficient					1	
Mammalia	Monotremata	Tachyglossidae	Zaglossus	Zaglossus attenboroughi	True	Critically Endangered			1			
Mammalia	Primates	Atelidae	Alouatta	Alouatta nigerrima	True	Least Concern					1	
Mammalia	Rodentia	Heteromyidae	Heteromys	Heteromys teleus	True	Vulnerable						1
Mammalia	Rodentia	Cricetidae	Oligoryzomys	Oligoryzomys moojeni	True	Data Deficient					1	
Mammalia	Rodentia	Cricetidae	Delomys	Delomys collinus	True	Least Concern					1	
Mammalia	Primates	Cebidae	Sapajus	Sapajus libidinosus	True	Near Threatened					1	
Mammalia	Chiroptera	Emballonuridae	Centronycteris	Centronycteris centralis		Least Concern						1
Mammalia	Chiroptera	Pteropodidae	Dyacopterus	Dyacopterus brooksi	True	Vulnerable			1			
Mammalia	Rodentia	Cricetidae	Oecomys	Oecomys catherinae	True	Least Concern					1	
Mammalia	Primates	Cebidae	Sapajus	Sapajus cay		Least Concern					1	
Mammalia	Chiroptera	Rhinolophidae	Rhinolophus	Rhinolophus madurensis	True	Vulnerable			1			
Mammalia	Rodentia	Cricetidae	Thomasomys	Thomasomys caudivarius		Least Concern						1
Mammalia	Chiroptera	Pteropodidae	Nyctimene	Nyctimene keasti		Near Threatened			1			
Mammalia	Rodentia	Cricetidae	Brucepattersonius	Brucepattersonius soricinus	True	Data Deficient					1	
Mammalia	Diprotodontia	Phalangeridae	Spilocuscus	Spilocuscus wilsoni	True	Critically Endangered			1			
Mammalia	Cetartiodactyla	Suidae	Babyrousa	Babyrousa celebensis	True	Vulnerable			1			
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura vosmaeri	True	Data Deficient			1			
Mammalia	Rodentia	Cricetidae	Microakodontomys	Microakodontomys transitorius	True	Endangered					1	
Mammalia	Cetartiodactyla	Suidae	Babyrousa	Babyrousa togeanensis	True	Endangered			1			
Mammalia	Rodentia	Cricetidae	Thomasomys	Thomasomys ucucha	True	Vulnerable						1
Mammalia	Rodentia	Echimyidae	Trinomys	Trinomys paratus	True	Data Deficient					1	
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis natunae	True	Vulnerable			1			
Mammalia	Rodentia	Cricetidae	Cerradomys	Cerradomys marinhus	True	Least Concern					1	
Mammalia	Chiroptera	Vespertilionidae	Eptesicus	Eptesicus chiriquinus		Least Concern					1	1
Mammalia	Chiroptera	Pteropodidae	Aethalops	Aethalops aequalis		Least Concern			1			
Mammalia	Didelphimorphia	Didelphidae	Cryptonanus	Cryptonanus agricolai	True	Data Deficient					1	
Mammalia	Monotremata	Tachyglossidae	Zaglossus	Zaglossus bartoni		Vulnerable			1			
Mammalia	Rodentia	Ctenomyidae	Ctenomys	Ctenomys lami	True	Vulnerable					1	
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula krauensis		Near Threatened			1			
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus rosenbergii	True	Least Concern			1			

Mammalia	Chiroptera	Miniopteridae	Miniopterus	Miniopterus macrocneme		Least Concern					1		
Mammalia	Chiroptera	Thyropteridae	Thyroptera	Thyroptera devivoi		Data Deficient						1	
Mammalia	Carnivora	Felidae	Neofelis	Neofelis diardi		Vulnerable					1		
Mammalia	Primates	Cercopithecidae	Cercocebus	Cercocebus agilis		Least Concern			1				
Mammalia	Rodentia	Muridae	Lophuromys	Lophuromys eisentrauti	True	Critically Endangered			1				
Mammalia	Rodentia	Muridae	Sommeromys	Sommeromys macrorhinos	True	Data Deficient					1		
Mammalia	Didelphimorphia	Didelphidae	Thylamys	Thylamys karimii	True	Vulnerable						1	
Mammalia	Rodentia	Muridae	Taeromys	Taeromys microbullatus	True	Data Deficient					1		
Mammalia	Rodentia	Cricetidae	Brucepattersonius	Brucepattersonius igniventris	True	Data Deficient						1	
Mammalia	Rodentia	Muridae	Leopoldamys	Leopoldamys ciliatus		Least Concern					1		
Mammalia	Diprotodontia	Macropodidae	Dendrolagus	Dendrolagus pulcherrimus		Critically Endangered					1		
Mammalia	Rodentia	Muridae	Rattus	Rattus salocco	True	Data Deficient					1		
Mammalia	Rodentia	Erethizontidae	Coendou	Coendou quichua		Data Deficient							1
Mammalia	Didelphimorphia	Didelphidae	Cryptonanus	Cryptonanus guahybae	True	Data Deficient						1	
Mammalia	Cetartiodactyla	Cervidae	Mazama	Mazama nemorivaga		Least Concern						1	1
Mammalia	Primates	Cebidae	Sapajus	Sapajus nigritus		Near Threatened						1	
Mammalia	Rodentia	Cricetidae	Oligoryzomys	Oligoryzomys fornesi		Least Concern						1	
Mammalia	Paucituberculata	Caenolestidae	Caenolestes	Caenolestes condorensis		Vulnerable							1
Mammalia	Rodentia	Muridae	Niviventer	Niviventer fraternus	True	Least Concern					1		
Mammalia	Rodentia	Muridae	Uromys	Uromys boeadii	True	Critically Endangered					1		
Mammalia	Chiroptera	Pteropodidae	Harpyionycteris	Harpyionycteris celebensis	True	Near Threatened					1		
Mammalia	Eulipotyphla	Soricidae	Crocidura	Crocidura hutanis	True	Least Concern					1		
Mammalia	Primates	Atelidae	Alouatta	Alouatta puruensis		Vulnerable						1	
Mammalia	Primates	Callitrichidae	Mico	Mico rondoni	True	Vulnerable						1	
Mammalia	Cetartiodactyla	Cervidae	Muntiacus	Muntiacus montanus	True	Data Deficient					1		
Mammalia	Chiroptera	Pteropodidae	Paranyctimene	Paranyctimene tenax		Least Concern					1		
Mammalia	Primates	Lorisidae	Perodicticus	Perodicticus edwardsi		Least Concern			1				
Mammalia	Primates	Callitrichidae	Cebuella	Cebuella niveiventris		Vulnerable						1	
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis sumatranus	True	Endangered					1		
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus lowei		Vulnerable	1	1					
Mammalia	Primates	Cercopithecidae	Cercocebus	Cercocebus atys		Vulnerable	1						
Amphibia	Anura	Centrolenidae	Centrolene	Centrolene condor	True	Data Deficient							1
Amphibia	Anura	Centrolenidae	Rulyrana	Rulyrana mcdiarmidi		Data Deficient							1
Amphibia	Anura	Bufonidae	Dendrophryniscus	Dendrophryniscus krausae	True	Data Deficient						1	
Amphibia	Anura	Phyllomedusidae	Phasmahyla	Phasmahyla spectabilis	True	Data Deficient						1	
Amphibia	Anura	Phyllomedusidae	Phasmahyla	Phasmahyla timbo	True	Data Deficient						1	
Amphibia	Anura	Leptodactylidae	Physalaemus	Physalaemus insperatus	True	Data Deficient						1	
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis achuar		Least Concern							1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis kichwarum	True	Least Concern							1
Amphibia	Anura	Hylidae	Trachycephalus	Trachycephalus dibernardoi		Least Concern						1	
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus tigrinus		Endangered							1
Amphibia	Anura	Craugastoridae	Holoaden	Holoaden pholeter	True	Data Deficient						1	
Amphibia	Anura	Arthroleptidae	Arthroleptis	Arthroleptis krokosua		Critically Endangered		1					
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus intermedius	True	Critically Endangered		1					
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes vulpiae		Least Concern			1				
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes euskircheni	True	Endangered			1				
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes juliawurstnerae	True	Endangered			1				
Amphibia	Anura	Hyperoliidae	Morerella	Morerella cyanophthalma	True	Vulnerable	1						
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius tumpara	True	Critically Endangered					1		
Amphibia	Anura	Hylidae	Sphaenorhynchus	Sphaenorhynchus mirim	True	Data Deficient						1	
Amphibia	Anura	Hylidae	Scinax	Scinax tigrinus	True	Least Concern						1	
Amphibia	Anura	Dendrobatidae	Ectopoglossus	Ectopoglossus confusus	True	Endangered							1
Amphibia	Anura	Bufonidae	Rhaebo	Rhaebo andinophrynoides		Vulnerable							1
Amphibia	Anura	Ranidae	Chalcorana	Chalcorana rufipes	True	Least Concern					1		
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius wallacei	True	Vulnerable					1		
Amphibia	Anura	Centrolenidae	Hyalinobatrachium	Hyalinobatrachium munozorum		Least Concern							1

Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis bambu	True	Data Deficient								1
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus schioetzi		Endangered				1				
Amphibia	Anura	Bufonidae	Nimbaphrynoides	Nimbaphrynoides occidentalis		Critically Endangered	1							
Amphibia	Anura	Microhylidae	Elachistocleis	Elachistocleis carvalhoi	True	Least Concern							1	
Amphibia	Anura	Microhylidae	Elachistocleis	Elachistocleis helianneae		Least Concern							1	
Amphibia	Anura	Microhylidae	Elachistocleis	Elachistocleis matogrosso	True	Least Concern							1	
Aves	Struthioniformes	Rheidae	Rhea	Rhea americana		Near Threatened							1	
Aves	Struthioniformes	Casuariidae	Casuarius	Casuarius bennetti		Least Concern					1			
Aves	Struthioniformes	Casuariidae	Casuarius	Casuarius unappendiculatus		Least Concern					1			
Aves	Struthioniformes	Tinamidae	Tinamus	Tinamus tao		Vulnerable							1	1
Aves	Struthioniformes	Tinamidae	Tinamus	Tinamus solitarius		Near Threatened							1	
Aves	Struthioniformes	Tinamidae	Tinamus	Tinamus osgoodi		Vulnerable								1
Aves	Struthioniformes	Tinamidae	Tinamus	Tinamus major		Least Concern							1	1
Aves	Struthioniformes	Tinamidae	Tinamus	Tinamus guttatus		Near Threatened							1	1
Aves	Struthioniformes	Tinamidae	Crypturellus	Crypturellus transfasciatus		Near Threatened								1
Aves	Struthioniformes	Tinamidae	Crypturellus	Crypturellus duidae		Least Concern							1	
Aves	Struthioniformes	Tinamidae	Crypturellus	Crypturellus noctivagus	True	Near Threatened							1	
Aves	Struthioniformes	Tinamidae	Crypturellus	Crypturellus atrocapillus		Least Concern							1	
Aves	Struthioniformes	Tinamidae	Nothura	Nothura minor		Vulnerable							1	
Aves	Struthioniformes	Tinamidae	Taoniscus	Taoniscus nanus		Endangered							1	
Aves	Galliformes	Cracidae	Ortalis	Ortalis erythroptera		Vulnerable								1
Aves	Galliformes	Cracidae	Ortalis	Ortalis superciliaris	True	Least Concern							1	
Aves	Galliformes	Cracidae	Penelope	Penelope barbata		Near Threatened								1
Aves	Galliformes	Cracidae	Penelope	Penelope ortoni		Endangered								1
Aves	Galliformes	Cracidae	Penelope	Penelope superciliaris		Near Threatened							1	
Aves	Galliformes	Cracidae	Penelope	Penelope purpurascens		Near Threatened								1
Aves	Galliformes	Cracidae	Penelope	Penelope pileata	True	Vulnerable							1	
Aves	Galliformes	Cracidae	Penelope	Penelope ochrogaster	True	Vulnerable							1	
Aves	Galliformes	Cracidae	Penelope	Penelope jacucaca	True	Vulnerable							1	
Aves	Galliformes	Cracidae	Pipile	Pipile cujubi		Vulnerable							1	
Aves	Galliformes	Cracidae	Pipile	Pipile jacutinga		Endangered							1	
Aves	Galliformes	Cracidae	Aburria	Aburria aburri		Near Threatened								1
Aves	Galliformes	Cracidae	Mitu	Mitu tomentosum		Near Threatened							1	
Aves	Galliformes	Cracidae	Mitu	Mitu tuberosum		Near Threatened							1	
Aves	Galliformes	Cracidae	Crax	Crax rubra		Vulnerable								1
Aves	Galliformes	Cracidae	Crax	Crax alector		Least Concern							1	
Aves	Galliformes	Cracidae	Crax	Crax globulosa		Endangered							1	
Aves	Galliformes	Cracidae	Crax	Crax blumenbachii	True	Endangered							1	
Aves	Galliformes	Megapodiidae	Macrocephalon	Macrocephalon maleo	True	Critically Endangered					1			
Aves	Galliformes	Megapodiidae	Megapodius	Megapodius cumingii		Least Concern					1			
Aves	Galliformes	Megapodiidae	Megapodius	Megapodius bernsteinii	True	Vulnerable					1			
Aves	Galliformes	Megapodiidae	Megapodius	Megapodius freycinet	True	Least Concern					1			
Aves	Galliformes	Megapodiidae	Eulipoa	Eulipoa wallacei	True	Vulnerable					1			
Aves	Galliformes	Phasianidae	Scleroptila	Scleroptila streptophora		Near Threatened				1				
Aves	Galliformes	Phasianidae	Pternistis	Pternistis camerunensis	True	Endangered				1				
Aves	Galliformes	Phasianidae	Melanoperdix	Melanoperdix niger		Vulnerable					1			
Aves	Galliformes	Phasianidae	Arborophila	Arborophila orientalis	True	Vulnerable					1			
Aves	Galliformes	Phasianidae	Rollulus	Rollulus rouloul		Vulnerable					1			
Aves	Galliformes	Phasianidae	Lophura	Lophura bulweri		Vulnerable					1			
Aves	Galliformes	Phasianidae	Pavo	Pavo muticus		Endangered					1			
Aves	Galliformes	Numididae	Agelastes	Agelastes meleagrides		Vulnerable	1	1						
Aves	Galliformes	Odontophoridae	Odontophorus	Odontophorus gujanensis		Least Concern							1	1
Aves	Galliformes	Odontophoridae	Odontophorus	Odontophorus melanonotus		Vulnerable								1
Aves	Galliformes	Odontophoridae	Odontophorus	Odontophorus speciosus		Near Threatened								1
Aves	Anseriformes	Anatidae	Neochen	Neochen jubata		Near Threatened							1	1
Aves	Anseriformes	Anatidae	Asarcornis	Asarcornis scutulata		Endangered					1			

Aves	Anseriformes	Anatidae	Pteronetta	Pteronetta hartlaubii		Least Concern	1	1	1				
Aves	Anseriformes	Anatidae	Spatula	Spatula hottentota		Least Concern			1				
Aves	Anseriformes	Anatidae	Marmaronetta	Marmaronetta angustirostris		Vulnerable			1				
Aves	Anseriformes	Anatidae	Netta	Netta erythrophthalma		Least Concern						1	1
Aves	Anseriformes	Anatidae	Mergus	Mergus octosetaceus		Critically Endangered						1	
Aves	Charadriiformes	Turnicidae	Turnix	Turnix everetti	True	Vulnerable				1			
Aves	Piciformes	Indicatoridae	Indicator	Indicator archipelagicus		Near Threatened				1			
Aves	Piciformes	Indicatoridae	Melignomon	Melignomon eisentrauti		Near Threatened	1	1	1				
Aves	Piciformes	Picidae	Picumnus	Picumnus spilogaster		Vulnerable						1	
Aves	Piciformes	Picidae	Picumnus	Picumnus varzeae	True	Endangered						1	
Aves	Piciformes	Picidae	Picumnus	Picumnus fulvescens	True	Near Threatened						1	
Aves	Piciformes	Picidae	Picumnus	Picumnus limae	True	Least Concern						1	
Aves	Piciformes	Picidae	Picumnus	Picumnus nebulosus		Near Threatened						1	
Aves	Piciformes	Picidae	Veniliornis	Veniliornis chocoensis		Near Threatened							1
Aves	Piciformes	Picidae	Piculus	Piculus aurulentus		Near Threatened						1	
Aves	Piciformes	Picidae	Celeus	Celeus galeatus		Vulnerable						1	
Aves	Piciformes	Picidae	Campephilus	Campephilus gayaquilensis		Near Threatened							1
Aves	Piciformes	Picidae	Chloropicoides	Chloropicoides rafflesii		Near Threatened				1			
Aves	Piciformes	Picidae	Meiglyptes	Meiglyptes tukki		Near Threatened				1			
Aves	Piciformes	Megalaimidae	Psilopogon	Psilopogon rafflesii		Near Threatened				1			
Aves	Piciformes	Megalaimidae	Psilopogon	Psilopogon mystacophanos		Near Threatened				1			
Aves	Piciformes	Megalaimidae	Psilopogon	Psilopogon javensis	True	Near Threatened				1			
Aves	Piciformes	Megalaimidae	Psilopogon	Psilopogon henricii		Near Threatened				1			
Aves	Piciformes	Capitonidae	Capito	Capito squamatus		Least Concern							1
Aves	Piciformes	Capitonidae	Capito	Capito dayi		Vulnerable						1	
Aves	Piciformes	Capitonidae	Capito	Capito quinticolor		Near Threatened							1
Aves	Piciformes	Semnornithidae	Semnornis	Semnornis ramphastinus		Near Threatened							1
Aves	Piciformes	Ramphastidae	Pteroglossus	Pteroglossus bailloni		Near Threatened						1	
Aves	Piciformes	Ramphastidae	Andigena	Andigena laminirostris		Near Threatened							1
Aves	Piciformes	Ramphastidae	Andigena	Andigena hypoglauca		Near Threatened							1
Aves	Piciformes	Ramphastidae	Ramphastos	Ramphastos tucanus		Vulnerable						1	
Aves	Piciformes	Galbulidae	Jacamaralcyon	Jacamaralcyon tridactyla	True	Near Threatened						1	
Aves	Piciformes	Galbulidae	Galbula	Galbula pastazae		Vulnerable							1
Aves	Bucerotiformes	Bucerotidae	Anthracoceros	Anthracoceros albirostris		Least Concern				1			
Aves	Bucerotiformes	Bucerotidae	Anthracoceros	Anthracoceros malayanus		Vulnerable				1			
Aves	Bucerotiformes	Bucerotidae	Buceros	Buceros rhinoceros		Vulnerable				1			
Aves	Bucerotiformes	Bucerotidae	Buceros	Buceros bicornis		Vulnerable				1			
Aves	Bucerotiformes	Bucerotidae	Rhinoplax	Rhinoplax vigil		Critically Endangered				1			
Aves	Bucerotiformes	Bucerotidae	Anorrhinus	Anorrhinus galeritus		Near Threatened				1			
Aves	Bucerotiformes	Bucerotidae	Berenicornis	Berenicornis comatus		Endangered				1			
Aves	Bucerotiformes	Bucerotidae	Rhabdotorrhinus	Rhabdotorrhinus corrugatus		Endangered				1			
Aves	Bucerotiformes	Bucerotidae	Rhyticeros	Rhyticeros undulatus		Vulnerable				1			
Aves	Bucerotiformes	Bucerotidae	Rhyticeros	Rhyticeros everetti	True	Endangered				1			
Aves	Bucerotiformes	Bucerotidae	Bycanistes	Bycanistes cylindricus		Vulnerable	1	1					
Aves	Bucerotiformes	Bucerotidae	Ceratogymna	Ceratogymna elata		Vulnerable	1	1	1				
Aves	Bucerotiformes	Bucerotidae	Bucorvus	Bucorvus abyssinicus		Vulnerable	1	1	1				
Aves	Bucerotiformes	Upupidae	Upupa	Upupa epops		Least Concern	1	1	1				
Aves	Trogoniformes	Trogonidae	Apalharpactes	Apalharpactes reinwardtii	True	Vulnerable				1			
Aves	Trogoniformes	Trogonidae	Harpactes	Harpactes kasumba		Near Threatened				1			
Aves	Trogoniformes	Trogonidae	Harpactes	Harpactes diardii		Near Threatened				1			
Aves	Trogoniformes	Trogonidae	Harpactes	Harpactes whiteheadi		Near Threatened				1			
Aves	Trogoniformes	Trogonidae	Harpactes	Harpactes orrhophaeus		Near Threatened				1			
Aves	Trogoniformes	Trogonidae	Harpactes	Harpactes duvaucelii		Near Threatened				1			
Aves	Coraciiformes	Coraciidae	Coracias	Coracias garrulus		Least Concern	1	1	1				
Aves	Coraciiformes	Coraciidae	Eurystomus	Eurystomus azureus	True	Near Threatened				1			
Aves	Coraciiformes	Alcedinidae	Todiramphus	Todiramphus lazuli	True	Near Threatened				1			

Aves	Coraciiformes	Alcedinidae	Todiramphus	Todiramphus funebris	True	Vulnerable	1	
Aves	Coraciiformes	Alcedinidae	Todiramphus	Todiramphus australasia		Near Threatened	1	
Aves	Coraciiformes	Alcedinidae	Actenoides	Actenoides concretus		Near Threatened	1	
Aves	Coraciiformes	Alcedinidae	Tanysiptera	Tanysiptera ellioti	True	Vulnerable	1	
Aves	Coraciiformes	Alcedinidae	Tanysiptera	Tanysiptera riedelii	True	Near Threatened	1	
Aves	Coraciiformes	Alcedinidae	Tanysiptera	Tanysiptera carolinae	True	Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Hierococcyx	Hierococcyx vagans		Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Cacomantis	Cacomantis aeruginosus	True	Least Concern	1	
Aves	Cuculiformes	Cuculidae	Phaenicophaeus	Phaenicophaeus diardi		Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Phaenicophaeus	Phaenicophaeus sumatranus		Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Carpococcyx	Carpococcyx radiceus		Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Centropus	Centropus chalybeus	True	Near Threatened	1	
Aves	Cuculiformes	Cuculidae	Centropus	Centropus rectunguis		Vulnerable	1	
Aves	Cuculiformes	Cuculidae	Centropus	Centropus nigrorufus	True	Vulnerable	1	
Aves	Cuculiformes	Cuculidae	Neomorphus	Neomorphus radiolosus		Endangered		1
Aves	Psittaciformes	Psittacidae	Eos	Eos histrio	True	Endangered	1	
Aves	Psittaciformes	Psittacidae	Eos	Eos cyanogenia	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Charmosyna	Charmosyna toxopei	True	Critically Endangered	1	
Aves	Psittaciformes	Psittacidae	Charmosyna	Charmosyna multistriata		Near Threatened	1	
Aves	Psittaciformes	Cacatuidae	Cacatua	Cacatua moluccensis	True	Vulnerable	1	
Aves	Psittaciformes	Cacatuidae	Cacatua	Cacatua alba	True	Endangered	1	
Aves	Psittaciformes	Cacatuidae	Cacatua	Cacatua goffiniana	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Micropsitta	Micropsitta geelvinkiana	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Psittaculirostris	Psittaculirostris salvadorii	True	Least Concern	1	
Aves	Psittaciformes	Psittacidae	Prioniturus	Prioniturus flavicans	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Tanygnathus	Tanygnathus lucionensis		Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Tanygnathus	Tanygnathus gramineus	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Psittrichas	Psittrichas fulgidus		Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Aprosmictus	Aprosmictus jonquillaceus		Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Loriculus	Loriculus catamene	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Loriculus	Loriculus exilis	True	Least Concern	1	
Aves	Psittaciformes	Psittacidae	Loriculus	Loriculus pusillus	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Loriculus	Loriculus flosculus	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Psittacula	Psittacula alexandri		Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Belocercus	Belocercus longicaudus		Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Anodorhynchus	Anodorhynchus hyacinthinus		Vulnerable		1
Aves	Psittaciformes	Psittacidae	Anodorhynchus	Anodorhynchus leari	True	Endangered		1
Aves	Psittaciformes	Psittacidae	Ara	Ara militaris		Vulnerable		1
Aves	Psittaciformes	Psittacidae	Ara	Ara ambiguus		Critically Endangered		1
Aves	Psittaciformes	Psittacidae	Primolius	Primolius maracana		Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Psittacara	Psittacara erythrogenys		Near Threatened		1
Aves	Psittaciformes	Psittacidae	Aratinga	Aratinga auricapillus	True	Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Leptosittaca	Leptosittaca branickii		Least Concern		1
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura cruentata	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura devillei		Near Threatened	1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura lepida	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura perlata		Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura rupicola		Least Concern	1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura albipectus		Vulnerable		1
Aves	Psittaciformes	Psittacidae	Brotogeris	Brotogeris pyrrhoptera		Vulnerable		1
Aves	Psittaciformes	Psittacidae	Touit	Touit huetii		Vulnerable	1	1
Aves	Psittaciformes	Psittacidae	Touit	Touit melanonotus	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Touit	Touit surdus	True	Vulnerable	1	
Aves	Psittaciformes	Psittacidae	Touit	Touit stictopterus		Near Threatened		1
Aves	Psittaciformes	Psittacidae	Pyrilia	Pyrilia barrabandi		Near Threatened	1	1
Aves	Psittaciformes	Psittacidae	Pyrilia	Pyrilia caica		Near Threatened	1	

Aves	Psittaciformes	Psittacidae	Pyrilia	Pyrilia vulturina	True	Vulnerable							1	
Aves	Psittaciformes	Psittacidae	Hapalopsittaca	Hapalopsittaca pyrrhops		Least Concern								1
Aves	Psittaciformes	Psittacidae	Amazona	Amazona rhodocorytha	True	Vulnerable							1	
Aves	Psittaciformes	Psittacidae	Amazona	Amazona brasiliensis	True	Near Threatened							1	
Aves	Psittaciformes	Psittacidae	Alipiopsitta	Alipiopsitta xanthops		Near Threatened							1	
Aves	Psittaciformes	Psittacidae	Amazona	Amazona aestiva		Near Threatened							1	
Aves	Psittaciformes	Psittacidae	Amazona	Amazona kawalli	True	Near Threatened							1	
Aves	Psittaciformes	Psittacidae	Amazona	Amazona vinacea		Endangered							1	
Aves	Psittaciformes	Psittacidae	Triclaria	Triclaria malachitacea		Near Threatened							1	
Aves	Caprimulgiformes	Apodidae	Hydrochous	Hydrochous gigas		Near Threatened					1			
Aves	Caprimulgiformes	Apodidae	Aerodramus	Aerodramus vulcanorum	True	Near Threatened					1			
Aves	Caprimulgiformes	Trochilidae	Ramphodon	Ramphodon naevius	True	Least Concern							1	
Aves	Caprimulgiformes	Trochilidae	Glaucis	Glaucis dohrnii	True	Vulnerable							1	
Aves	Caprimulgiformes	Trochilidae	Campylopterus	Campylopterus villaviscensio		Near Threatened								1
Aves	Caprimulgiformes	Trochilidae	Lophornis	Lophornis gouldii		Near Threatened							1	
Aves	Caprimulgiformes	Trochilidae	Discosura	Discosura popelairii		Near Threatened								1
Aves	Caprimulgiformes	Trochilidae	Thalurania	Thalurania watertonii	True	Endangered							1	
Aves	Caprimulgiformes	Trochilidae	Phlogophilus	Phlogophilus hemileucurus		Vulnerable								1
Aves	Caprimulgiformes	Trochilidae	Heliodoxa	Heliodoxa gularis		Vulnerable								1
Aves	Caprimulgiformes	Trochilidae	Heliangelus	Heliangelus regalis		Endangered								1
Aves	Caprimulgiformes	Trochilidae	Eriocnemis	Eriocnemis nigrivestis	True	Endangered								1
Aves	Caprimulgiformes	Trochilidae	Eriocnemis	Eriocnemis derbyi		Near Threatened								1
Aves	Caprimulgiformes	Trochilidae	Haplophaedia	Haplophaedia lugens		Near Threatened								1
Aves	Caprimulgiformes	Trochilidae	Metallura	Metallura baroni	True	Endangered								1
Aves	Caprimulgiformes	Trochilidae	Chaetocercus	Chaetocercus bombus		Near Threatened								1
Aves	Caprimulgiformes	Trochilidae	Chaetocercus	Chaetocercus berlepschi	True	Vulnerable								1
Aves	Musophagiformes	Musophagidae	Tauraco	Tauraco bannermani	True	Endangered				1				
Aves	Strigiformes	Tytonidae	Tyto	Tyto inexspectata	True	Vulnerable					1			
Aves	Strigiformes	Strigidae	Otus	Otus rufescens		Near Threatened					1			
Aves	Strigiformes	Strigidae	Otus	Otus umbra	True	Near Threatened					1			
Aves	Strigiformes	Strigidae	Otus	Otus angelinae	True	Vulnerable					1			
Aves	Strigiformes	Strigidae	Otus	Otus mentawi	True	Near Threatened					1			
Aves	Strigiformes	Strigidae	Megascops	Megascops colombianus		Near Threatened								1
Aves	Strigiformes	Strigidae	Bubo	Bubo shelleyi		Vulnerable	1		1	1				
Aves	Strigiformes	Strigidae	Scotopelia	Scotopelia ussheri		Vulnerable	1		1					
Aves	Strigiformes	Strigidae	Strix	Strix hylophila		Near Threatened							1	
Aves	Strigiformes	Strigidae	Ninox	Ninox rudolfi	True	Near Threatened					1			
Aves	Strigiformes	Strigidae	Ninox	Ninox ochracea	True	Near Threatened					1			
Aves	Strigiformes	Strigidae	Asio	Asio flammeus		Least Concern							1	1
Aves	Caprimulgiformes	Aegothelidae	Aegotheles	Aegotheles wallacii		Least Concern					1			
Aves	Caprimulgiformes	Podargidae	Batrachostomus	Batrachostomus auritus		Near Threatened					1			
Aves	Caprimulgiformes	Podargidae	Batrachostomus	Batrachostomus harterti		Near Threatened					1			
Aves	Caprimulgiformes	Podargidae	Batrachostomus	Batrachostomus stellatus		Near Threatened					1			
Aves	Caprimulgiformes	Podargidae	Batrachostomus	Batrachostomus poliolophus	True	Near Threatened					1			
Aves	Caprimulgiformes	Podargidae	Batrachostomus	Batrachostomus mixtus		Near Threatened					1			
Aves	Caprimulgiformes	Caprimulgidae	Eurostopodus	Eurostopodus diabolicus	True	Vulnerable					1			
Aves	Caprimulgiformes	Caprimulgidae	Nyctiprogne	Nyctiprogne vielliardi	True	Least Concern							1	
Aves	Caprimulgiformes	Caprimulgidae	Eleothreptus	Eleothreptus candicans		Vulnerable							1	
Aves	Caprimulgiformes	Caprimulgidae	Caprimulgus	Caprimulgus concretus		Vulnerable					1			
Aves	Caprimulgiformes	Caprimulgidae	Caprimulgus	Caprimulgus pulchellus	True	Near Threatened					1			
Aves	Caprimulgiformes	Caprimulgidae	Eleothreptus	Eleothreptus anomalus		Vulnerable							1	
Aves	Columbiformes	Columbidae	Columba	Columba albinucha		Near Threatened				1				
Aves	Columbiformes	Columbidae	Columba	Columba argentina		Critically Endangered					1			
Aves	Columbiformes	Columbidae	Patagioenas	Patagioenas oenops		Vulnerable								1
Aves	Columbiformes	Columbidae	Patagioenas	Patagioenas subvinacea		Least Concern							1	1
Aves	Columbiformes	Columbidae	Streptopelia	Streptopelia turtur		Vulnerable	1		1	1				

Aves	Columbiformes	Columbidae	Turacoena	Turacoena modesta		Near Threatened				1			
Aves	Columbiformes	Columbidae	Columbina	Columbina cyanopis	True	Critically Endangered					1		
Aves	Columbiformes	Columbidae	Leptotila	Leptotila ochraceiventris		Vulnerable							1
Aves	Columbiformes	Columbidae	Caloenas	Caloenas nicobarica		Near Threatened				1			
Aves	Columbiformes	Columbidae	Alopecoenas	Alopecoenas hoedtii		Endangered				1			
Aves	Columbiformes	Columbidae	Treron	Treron fulvicollis		Near Threatened				1			
Aves	Columbiformes	Columbidae	Treron	Treron floris	True	Vulnerable				1			
Aves	Columbiformes	Columbidae	Treron	Treron teysmannii	True	Near Threatened				1			
Aves	Columbiformes	Columbidae	Treron	Treron psittaceus		Endangered				1			
Aves	Columbiformes	Columbidae	Treron	Treron capellei		Vulnerable				1			
Aves	Columbiformes	Columbidae	Treron	Treron oxyurus	True	Near Threatened				1			
Aves	Columbiformes	Columbidae	Ptilinopus	Ptilinopus dohertyi	True	Vulnerable				1			
Aves	Columbiformes	Columbidae	Ramphiculus	Ramphiculus jambu		Near Threatened				1			
Aves	Columbiformes	Columbidae	Ptilinopus	Ptilinopus monacha	True	Near Threatened				1			
Aves	Columbiformes	Columbidae	Ptilinopus	Ptilinopus granulifrons	True	Vulnerable				1			
Aves	Columbiformes	Columbidae	Ducula	Ducula rosacea		Near Threatened				1			
Aves	Columbiformes	Columbidae	Ducula	Ducula pickeringii		Vulnerable				1			
Aves	Columbiformes	Columbidae	Ducula	Ducula cineracea		Near Threatened				1			
Aves	Columbiformes	Columbidae	Goura	Goura victoria		Near Threatened				1			
Aves	Otidiformes	Otididae	Neotis	Neotis denhami		Near Threatened	1	1	1				
Aves	Otidiformes	Otididae	Ardeotis	Ardeotis arabs		Near Threatened	1	1	1				
Aves	Gruiformes	Gruidae	Balearica	Balearica pavonina		Vulnerable			1				
Aves	Gruiformes	Heliornithidae	Heliopais	Heliopais personatus		Endangered				1			
Aves	Gruiformes	Psophiidae	Psophia	Psophia leucoptera		Near Threatened					1		
Aves	Gruiformes	Rallidae	Laterallus	Laterallus jamaicensis		Endangered					1		
Aves	Gruiformes	Rallidae	Laterallus	Laterallus spilonota	True	Vulnerable							1
Aves	Gruiformes	Rallidae	Laterallus	Laterallus xenopterus		Vulnerable					1		
Aves	Gruiformes	Rallidae	Crex	Crex egregia		Least Concern	1	1	1				
Aves	Gruiformes	Rallidae	Aramidopsis	Aramidopsis plateni	True	Vulnerable				1			
Aves	Gruiformes	Rallidae	Aramides	Aramides wolfi		Vulnerable							1
Aves	Gruiformes	Rallidae	Gymnocrex	Gymnocrex rosenbergii	True	Vulnerable				1			
Aves	Gruiformes	Rallidae	Zapornia	Zapornia pusilla		Least Concern				1			
Aves	Gruiformes	Rallidae	Laterallus	Laterallus spilopterus		Vulnerable					1		
Aves	Gruiformes	Rallidae	Zapornia	Zapornia paykullii		Near Threatened				1			
Aves	Gruiformes	Rallidae	Amaurornis	Amaurornis marginalis		Least Concern	1	1	1				
Aves	Charadriiformes	Scolopacidae	Scolopax	Scolopax saturata	True	Near Threatened				1			
Aves	Charadriiformes	Scolopacidae	Scolopax	Scolopax celebensis	True	Near Threatened				1			
Aves	Charadriiformes	Scolopacidae	Scolopax	Scolopax rochussenii	True	Vulnerable				1			
Aves	Charadriiformes	Scolopacidae	Gallinago	Gallinago media		Near Threatened	1	1	1				
Aves	Charadriiformes	Scolopacidae	Gallinago	Gallinago nobilis		Near Threatened							1
Aves	Charadriiformes	Scolopacidae	Gallinago	Gallinago imperialis		Near Threatened							1
Aves	Charadriiformes	Scolopacidae	Limosa	Limosa limosa		Near Threatened	1	1	1	1			
Aves	Charadriiformes	Scolopacidae	Limosa	Limosa lapponica		Near Threatened	1	1	1	1			
Aves	Charadriiformes	Scolopacidae	Numenius	Numenius arquata		Near Threatened	1	1	1	1			
Aves	Charadriiformes	Scolopacidae	Numenius	Numenius madagascariensis		Endangered				1			
Aves	Charadriiformes	Scolopacidae	Tringa	Tringa stagnatilis		Least Concern	1	1	1	1			
Aves	Charadriiformes	Scolopacidae	Tringa	Tringa glareola		Least Concern	1	1	1	1			
Aves	Charadriiformes	Scolopacidae	Limnodromus	Limnodromus semipalmatus		Near Threatened				1			
Aves	Charadriiformes	Scolopacidae	Calidris	Calidris tenuirostris		Endangered				1			
Aves	Charadriiformes	Scolopacidae	Calidris	Calidris canutus		Near Threatened	1	1	1		1		1
Aves	Charadriiformes	Scolopacidae	Calidris	Calidris ruficollis		Near Threatened				1			
Aves	Charadriiformes	Scolopacidae	Calidris	Calidris ferruginea		Near Threatened	1	1	1				
Aves	Charadriiformes	Scolopacidae	Calidris	Calidris subruficollis		Near Threatened					1		
Aves	Charadriiformes	Burhinidae	Burhinus	Burhinus grallarius		Least Concern				1			
Aves	Charadriiformes	Haematopodidae	Haematopus	Haematopus ostralegus		Near Threatened	1	1					
Aves	Charadriiformes	Charadriidae	Charadrius	Charadrius mongolus		Least Concern				1			

Aves	Charadriiformes	Charadriidae	Charadrius	Charadrius leschenaultii		Least Concern				1			
Aves	Charadriiformes	Glareolidae	Glareola	Glareola nordmanni		Near Threatened			1				
Aves	Charadriiformes	Laridae	Sternula	Sternula lorata		Endangered							1
Aves	Charadriiformes	Laridae	Chlidonias	Chlidonias niger		Least Concern	1	1	1		1	1	
Aves	Accipitriformes	Pandionidae	Pandion	Pandion haliaetus		Least Concern	1	1	1	1	1	1	
Aves	Accipitriformes	Accipitridae	Pernis	Pernis apivorus		Least Concern	1	1	1				
Aves	Accipitriformes	Accipitridae	Chelictinia	Chelictinia riocourii		Vulnerable	1	1	1				
Aves	Accipitriformes	Accipitridae	Haliaeetus	Haliaeetus leucogaster		Least Concern				1			
Aves	Accipitriformes	Accipitridae	Neophron	Neophron percnopterus		Endangered			1				
Aves	Accipitriformes	Accipitridae	Necrosyrtes	Necrosyrtes monachus		Critically Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Gyps	Gyps africanus		Critically Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Gyps	Gyps rueppelli		Critically Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Torgos	Torgos tracheliotos		Endangered	1		1				
Aves	Accipitriformes	Accipitridae	Trigonoceps	Trigonoceps occipitalis		Critically Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Terathopius	Terathopius ecaudatus		Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Spilornis	Spilornis kinabaluensis		Vulnerable				1			
Aves	Accipitriformes	Accipitridae	Circus	Circus aeruginosus		Least Concern	1	1	1				
Aves	Accipitriformes	Accipitridae	Circus	Circus macrourus		Near Threatened	1	1	1				
Aves	Accipitriformes	Accipitridae	Circus	Circus melanoleucos		Least Concern				1			
Aves	Accipitriformes	Accipitridae	Circus	Circus pygargus		Least Concern	1	1	1				
Aves	Accipitriformes	Accipitridae	Accipiter	Accipiter poliogaster		Near Threatened					1	1	
Aves	Accipitriformes	Accipitridae	Accipiter	Accipiter soloensis		Least Concern				1			
Aves	Accipitriformes	Accipitridae	Accipiter	Accipiter henicogrammus	True	Near Threatened				1			
Aves	Accipitriformes	Accipitridae	Accipiter	Accipiter gularis		Least Concern				1			
Aves	Accipitriformes	Accipitridae	Accipiter	Accipiter erythrauchen	True	Near Threatened				1			
Aves	Accipitriformes	Accipitridae	Butastur	Butastur indicus		Least Concern				1			
Aves	Accipitriformes	Accipitridae	Cryptoleucopteryx	Cryptoleucopteryx plumbea		Near Threatened							1
Aves	Accipitriformes	Accipitridae	Buteogallus	Buteogallus lacernulatus	True	Vulnerable					1		
Aves	Accipitriformes	Accipitridae	Pseudastur	Pseudastur occidentalis		Endangered							1
Aves	Accipitriformes	Accipitridae	Pseudastur	Pseudastur polionotus		Near Threatened					1		
Aves	Accipitriformes	Accipitridae	Buteogallus	Buteogallus solitarius		Near Threatened							1
Aves	Accipitriformes	Accipitridae	Buteogallus	Buteogallus coronatus		Endangered					1		
Aves	Accipitriformes	Accipitridae	Buteo	Buteo galapagoensis	True	Vulnerable							1
Aves	Accipitriformes	Accipitridae	Harpia	Harpia harpyja		Vulnerable					1	1	
Aves	Accipitriformes	Accipitridae	Harpyopsis	Harpyopsis novaeguineae		Vulnerable				1			
Aves	Accipitriformes	Accipitridae	Clanga	Clanga pomarina		Least Concern			1				
Aves	Accipitriformes	Accipitridae	Clanga	Clanga clanga		Vulnerable			1				
Aves	Accipitriformes	Accipitridae	Aquila	Aquila rapax		Vulnerable	1	1	1				
Aves	Accipitriformes	Accipitridae	Hieraaetus	Hieraaetus pennatus		Least Concern	1	1	1				
Aves	Accipitriformes	Accipitridae	Polemaetus	Polemaetus bellicosus		Endangered	1	1	1				
Aves	Accipitriformes	Accipitridae	Nisaetus	Nisaetus bartelsi	True	Endangered				1			
Aves	Accipitriformes	Accipitridae	Nisaetus	Nisaetus nanus		Vulnerable				1			
Aves	Accipitriformes	Accipitridae	Spizaetus	Spizaetus ornatus		Near Threatened					1	1	
Aves	Accipitriformes	Accipitridae	Stephanoaetus	Stephanoaetus coronatus		Near Threatened	1	1	1				
Aves	Accipitriformes	Accipitridae	Spizaetus	Spizaetus isidori		Endangered							1
Aves	Accipitriformes	Sagittariidae	Sagittarius	Sagittarius serpentarius		Endangered	1	1	1				
Aves	Falconiformes	Falconidae	Micrastur	Micrastur plumbeus		Vulnerable							1
Aves	Falconiformes	Falconidae	Microhierax	Microhierax latifrons		Near Threatened				1			
Aves	Falconiformes	Falconidae	Falco	Falco naumanni		Least Concern	1	1					
Aves	Falconiformes	Falconidae	Falco	Falco tinnunculus		Least Concern	1	1	1				
Aves	Falconiformes	Falconidae	Falco	Falco columbarius		Least Concern					1	1	
Aves	Falconiformes	Falconidae	Falco	Falco subbuteo		Least Concern	1						
Aves	Falconiformes	Falconidae	Falco	Falco severus		Least Concern				1			
Aves	Falconiformes	Falconidae	Falco	Falco biarmicus		Least Concern	1	1	1				
Aves	Falconiformes	Falconidae	Falco	Falco deiroleucus		Near Threatened					1	1	
Aves	Suliformes	Phalacrocoracidae	Microcarbo	Microcarbo melanoleucos		Least Concern				1			

Aves	Pelecaniformes	Ardeidae	Egretta	Egretta eulophotes		Vulnerable					1		
Aves	Pelecaniformes	Ardeidae	Ardea	Ardea cinerea		Least Concern	1	1	1	1	1		
Aves	Pelecaniformes	Ardeidae	Agamia	Agamia agami		Vulnerable					1	1	
Aves	Pelecaniformes	Ardeidae	Calherodius	Calherodius leuconotus		Least Concern	1	1	1				
Aves	Pelecaniformes	Ardeidae	Zebrilus	Zebrilus undulatus		Near Threatened					1	1	
Aves	Pelecaniformes	Threskiornithidae	Threskiornis	Threskiornis melanocephalus		Near Threatened				1			
Aves	Pelecaniformes	Threskiornithidae	Pseudibis	Pseudibis davisoni		Critically Endangered				1			
Aves	Pelecaniformes	Pelecanidae	Pelecanus	Pelecanus onocrotalus		Least Concern	1	1	1				
Aves	Pelecaniformes	Pelecanidae	Pelecanus	Pelecanus rufescens		Least Concern		1	1				
Aves	Pelecaniformes	Pelecanidae	Pelecanus	Pelecanus philippensis		Near Threatened				1			
Aves	Cathartiformes	Cathartidae	Vultur	Vultur gryphus		Vulnerable							1
Aves	Ciconiiformes	Ciconiidae	Mycteria	Mycteria cinerea		Endangered				1			
Aves	Ciconiiformes	Ciconiidae	Ciconia	Ciconia abdimii		Least Concern	1	1	1				
Aves	Ciconiiformes	Ciconiidae	Ephippiorhynchus	Ephippiorhynchus asiaticus		Near Threatened				1			
Aves	Ciconiiformes	Ciconiidae	Leptoptilos	Leptoptilos javanicus		Vulnerable				1			
Aves	Suliformes	Fregatidae	Fregata	Fregata andrewsi		Critically Endangered				1			
Aves	Procellariiformes	Procellariidae	Pterodroma	Pterodroma phaeopygia		Critically Endangered							1
Aves	Passeriformes	Pittidae	Hydrornis	Hydrornis schneideri	True	Vulnerable				1			
Aves	Passeriformes	Pittidae	Hydrornis	Hydrornis caeruleus		Near Threatened				1			
Aves	Passeriformes	Pittidae	Hydrornis	Hydrornis baudii		Vulnerable				1			
Aves	Passeriformes	Pittidae	Erythropitta	Erythropitta dohertyi	True	Near Threatened				1			
Aves	Passeriformes	Pittidae	Erythropitta	Erythropitta venusta	True	Vulnerable				1			
Aves	Passeriformes	Pittidae	Pitta	Pitta megarhyncha		Near Threatened				1			
Aves	Passeriformes	Eurylaimidae	Eurylaimus	Eurylaimus ochromalus		Near Threatened				1			
Aves	Passeriformes	Calyptomenidae	Calyptomena	Calyptomena viridis		Near Threatened				1			
Aves	Passeriformes	Calyptomenidae	Calyptomena	Calyptomena hosii		Near Threatened				1			
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus orbitatus	True	Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus rufigularis		Near Threatened							1
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus cinnamomeipectus		Least Concern							1
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus mirandae	True	Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus kaempferi	True	Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Hemitriccus	Hemitriccus furcatus	True	Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Phyllomyias	Phyllomyias griseocapilla	True	Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Zimmerius	Zimmerius cinereicapilla		Vulnerable							1
Aves	Passeriformes	Tyrannidae	Culicivora	Culicivora caudacuta		Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Polystictus	Polystictus pectoralis		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Pseudocolopteryx	Pseudocolopteryx dinelliana		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Euscarthmus	Euscarthmus rufomarginatus		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes gualaquizae		Near Threatened							1
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes roquettei	True	Endangered						1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes paulista		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes oustaleti	True	Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes difficilis	True	Least Concern						1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes ceciliae	True	Critically Endangered						1	
Aves	Passeriformes	Tyrannidae	Platyrinchus	Platyrinchus leucoryphus		Vulnerable						1	
Aves	Passeriformes	Tityridae	Onychorhynchus	Onychorhynchus occidentalis		Vulnerable							1
Aves	Passeriformes	Tityridae	Onychorhynchus	Onychorhynchus swainsoni	True	Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Nephelomyias	Nephelomyias lintoni		Near Threatened							1
Aves	Passeriformes	Tyrannidae	Lathrotriccus	Lathrotriccus griseipectus		Vulnerable							1
Aves	Passeriformes	Tyrannidae	Ochthoeca	Ochthoeca salvini		Near Threatened							1
Aves	Passeriformes	Tyrannidae	Xolmis	Xolmis dominicanus		Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Knipolegus	Knipolegus franciscanus	True	Least Concern						1	
Aves	Passeriformes	Tyrannidae	Alectrurus	Alectrurus tricolor		Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Alectrurus	Alectrurus risora		Vulnerable						1	
Aves	Passeriformes	Tyrannidae	Attila	Attila torridus		Vulnerable							1
Aves	Passeriformes	Tyrannidae	Conopias	Conopias cinchoneti		Vulnerable							1

Aves	Passeriformes	Tityridae	Pachyramphus	Pachyramphus spodiurus		Vulnerable		1
Aves	Passeriformes	Tityridae	Laniisoma	Laniisoma elegans	True	Near Threatened	1	
Aves	Passeriformes	Cotingidae	Carpornis	Carpornis cucullata	True	Near Threatened	1	
Aves	Passeriformes	Cotingidae	Carpornis	Carpornis melanocephala	True	Vulnerable	1	
Aves	Passeriformes	Cotingidae	Doliornis	Doliornis remseni		Vulnerable		1
Aves	Passeriformes	Cotingidae	Pipreola	Pipreola chlorolepidota		Near Threatened		1
Aves	Passeriformes	Tityridae	Iodopleura	Iodopleura pipra	True	Endangered	1	
Aves	Passeriformes	Tyrannidae	Calyptura	Calyptura cristata		Critically Endangered	1	
Aves	Passeriformes	Cotingidae	Lipaugus	Lipaugus lanioides	True	Near Threatened	1	
Aves	Passeriformes	Cotingidae	Cotinga	Cotinga maculata	True	Critically Endangered	1	
Aves	Passeriformes	Cotingidae	Xipholena	Xipholena lamellipennis	True	Near Threatened	1	
Aves	Passeriformes	Cotingidae	Xipholena	Xipholena atropurpurea	True	Vulnerable	1	
Aves	Passeriformes	Cotingidae	Cephalopterus	Cephalopterus penduliger		Vulnerable		1
Aves	Passeriformes	Cotingidae	Procnias	Procnias nudicollis		Near Threatened	1	
Aves	Passeriformes	Pipridae	Lepidothrix	Lepidothrix iris	True	Vulnerable	1	
Aves	Passeriformes	Pipridae	Lepidothrix	Lepidothrix vilasboasi	True	Least Concern	1	
Aves	Passeriformes	Pipridae	Lepidothrix	Lepidothrix isidorei		Near Threatened		1
Aves	Passeriformes	Pipridae	Chloropipo	Chloropipo flavicapilla		Vulnerable		1
Aves	Passeriformes	Pipridae	Neopelma	Neopelma aurifrons	True	Near Threatened	1	
Aves	Passeriformes	Tyrannidae	Piprites	Piprites pileata		Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Biatas	Biatas nigropectus		Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Thamnophilus	Thamnophilus nigrocinereus		Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Thamnophilus	Thamnophilus cryptoleucus		Near Threatened	1	1
Aves	Passeriformes	Thamnophilidae	Dysithamnus	Dysithamnus stictothorax		Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Dysithamnus	Dysithamnus leucostictus		Least Concern		1
Aves	Passeriformes	Thamnophilidae	Dysithamnus	Dysithamnus plumbeus	True	Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Dysithamnus	Dysithamnus occidentalis		Vulnerable		1
Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula klagesi	True	Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula surinamensis		Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Epinecrophylla	Epinecrophylla gutturalis		Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula minor	True	Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula unicolor	True	Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula urosticta	True	Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Herpsilochmus	Herpsilochmus sellowi	True	Least Concern	1	
Aves	Passeriformes	Thamnophilidae	Herpsilochmus	Herpsilochmus pectoralis	True	Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Herpsilochmus	Herpsilochmus axillaris		Vulnerable		1
Aves	Passeriformes	Thamnophilidae	Formicivora	Formicivora iheringi	True	Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Drymophila	Drymophila genei	True	Least Concern	1	
Aves	Passeriformes	Thamnophilidae	Terenura	Terenura sicki	True	Critically Endangered	1	
Aves	Passeriformes	Thamnophilidae	Cercomacra	Cercomacra brasiliana	True	Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Cercomacra	Cercomacra ferdinandi	True	Near Threatened	1	
Aves	Passeriformes	Thamnophilidae	Cercomacra	Cercomacra carbonaria		Critically Endangered	1	
Aves	Passeriformes	Thamnophilidae	Pyriglena	Pyriglena atra	True	Endangered	1	
Aves	Passeriformes	Thamnophilidae	Rhopornis	Rhopornis ardesiacus	True	Endangered	1	
Aves	Passeriformes	Thamnophilidae	Myrmoborus	Myrmoborus lugubris		Vulnerable	1	1
Aves	Passeriformes	Thamnophilidae	Myrmoborus	Myrmoborus melanurus		Vulnerable	1	
Aves	Passeriformes	Thamnophilidae	Myrmoderus	Myrmoderus ruficauda	True	Endangered	1	
Aves	Passeriformes	Thamnophilidae	Ampelornis	Ampelornis griseiceps		Vulnerable		1
Aves	Passeriformes	Thamnophilidae	Rhegmatorhina	Rhegmatorhina hoffmannsi	True	Least Concern	1	
Aves	Passeriformes	Thamnophilidae	Rhegmatorhina	Rhegmatorhina gymnops	True	Vulnerable	1	
Aves	Passeriformes	Furnariidae	Geositta	Geositta poeciloptera		Vulnerable	1	
Aves	Passeriformes	Furnariidae	Cinclodes	Cinclodes pabsti	True	Near Threatened	1	
Aves	Passeriformes	Furnariidae	Leptasthenura	Leptasthenura setaria		Near Threatened	1	
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis infuscata	True	Endangered	1	
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis moesta		Near Threatened		1
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis cabanisi		Near Threatened	1	

Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis tithys		Vulnerable			1
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis hellmayri	True	Least Concern		1	
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis maranonica		Critically Endangered			1
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis kollari		Critically Endangered		1	
Aves	Passeriformes	Furnariidae	Cranioleuca	Cranioleuca curtata		Vulnerable			1
Aves	Passeriformes	Furnariidae	Cranioleuca	Cranioleuca muelleri	True	Endangered		1	
Aves	Passeriformes	Furnariidae	Asthenes	Asthenes hudsoni		Near Threatened		1	
Aves	Passeriformes	Furnariidae	Thripophaga	Thripophaga macroura	True	Vulnerable		1	
Aves	Passeriformes	Furnariidae	Clibanornis	Clibanornis dendrocolaptoides		Near Threatened		1	
Aves	Passeriformes	Furnariidae	Spartonoica	Spartonoica maluroides		Near Threatened		1	
Aves	Passeriformes	Furnariidae	Xenerpestes	Xenerpestes singularis		Near Threatened			1
Aves	Passeriformes	Furnariidae	Margarornis	Margarornis stellatus		Near Threatened			1
Aves	Passeriformes	Furnariidae	Syndactyla	Syndactyla ruficollis		Vulnerable			1
Aves	Passeriformes	Furnariidae	Anabacerthia	Anabacerthia amaurotis		Near Threatened		1	
Aves	Passeriformes	Furnariidae	Clibanornis	Clibanornis erythrocephalus		Near Threatened			1
Aves	Passeriformes	Furnariidae	Sclerurus	Sclerurus albigularis		Near Threatened		1	1
Aves	Passeriformes	Furnariidae	Megaxenops	Megaxenops parnaguae	True	Least Concern		1	
Aves	Passeriformes	Furnariidae	Xiphocolaptes	Xiphocolaptes falcirostris	True	Vulnerable		1	
Aves	Passeriformes	Furnariidae	Dendrocolaptes	Dendrocolaptes hoffmannsi	True	Vulnerable		1	
Aves	Passeriformes	Furnariidae	Dendroplex	Dendroplex kienerii		Near Threatened		1	
Aves	Passeriformes	Furnariidae	Drymotoxeres	Drymotoxeres pucheranii		Near Threatened			1
Aves	Passeriformes	Formicariidae	Formicarius	Formicarius rufifrons		Near Threatened		1	
Aves	Passeriformes	Conopophagidae	Pittasoma	Pittasoma rufopileatum		Near Threatened			1
Aves	Passeriformes	Grallariidae	Grallaria	Grallaria gigantea		Vulnerable			1
Aves	Passeriformes	Grallariidae	Grallaria	Grallaria alleni		Vulnerable			1
Aves	Passeriformes	Grallariidae	Grallaria	Grallaria watkinsi		Near Threatened			1
Aves	Passeriformes	Grallariidae	Grallaria	Grallaria rufocinerea		Vulnerable			1
Aves	Passeriformes	Grallariidae	Hylopezus	Hylopezus ochroleucus	True	Near Threatened		1	
Aves	Passeriformes	Grallariidae	Grallaricula	Grallaricula flavirostris		Near Threatened			1
Aves	Passeriformes	Grallariidae	Grallaricula	Grallaricula peruviana		Near Threatened			1
Aves	Passeriformes	Grallariidae	Grallaricula	Grallaricula lineifrons		Least Concern			1
Aves	Passeriformes	Melanopareiidae	Melanopareia	Melanopareia maranonica		Least Concern			1
Aves	Passeriformes	Rhinocryptidae	Psilorhamphus	Psilorhamphus guttatus		Near Threatened		1	
Aves	Passeriformes	Rhinocryptidae	Merulaxis	Merulaxis ater	True	Near Threatened		1	
Aves	Passeriformes	Rhinocryptidae	Merulaxis	Merulaxis stresemanni	True	Critically Endangered		1	
Aves	Passeriformes	Rhinocryptidae	Scytalopus	Scytalopus novacapitalis	True	Endangered		1	
Aves	Passeriformes	Rhinocryptidae	Eleoscytalopus	Eleoscytalopus psychopompus	True	Endangered		1	
Aves	Passeriformes	Rhinocryptidae	Eleoscytalopus	Eleoscytalopus indigoticus	True	Near Threatened		1	
Aves	Passeriformes	Meliphagidae	Myzomela	Myzomela kuehni	True	Least Concern	1		
Aves	Passeriformes	Meliphagidae	Lichmera	Lichmera notabilis	True	Least Concern	1		
Aves	Passeriformes	Meliphagidae	Philemon	Philemon brassi	True	Near Threatened	1		
Aves	Passeriformes	Meliphagidae	Philemon	Philemon fuscicapillus	True	Vulnerable	1		
Aves	Passeriformes	Acanthizidae	Gerygone	Gerygone hypoxantha	True	Vulnerable	1		
Aves	Passeriformes	Chloropseidae	Chloropsis	Chloropsis sonnerati		Endangered	1		
Aves	Passeriformes	Chloropseidae	Chloropsis	Chloropsis cyanopogon		Near Threatened	1		
Aves	Passeriformes	Chloropseidae	Chloropsis	Chloropsis venusta	True	Near Threatened	1		
Aves	Passeriformes	Vireonidae	Vireo	Vireo masteri		Near Threatened			1
Aves	Passeriformes	Vireonidae	Hylophilus	Hylophilus olivaceus		Near Threatened			1
Aves	Passeriformes	Eupetidae	Eupetes	Eupetes macrocerus		Near Threatened	1		
Aves	Passeriformes	Platylophidae	Platylophus	Platylophus galericulatus		Near Threatened	1		
Aves	Passeriformes	Corvidae	Cyanolyca	Cyanolyca pulchra		Near Threatened			1
Aves	Passeriformes	Corvidae	Cyanocorax	Cyanocorax coeruleus		Near Threatened		1	
Aves	Passeriformes	Corvidae	Corvus	Corvus unicolor		Critically Endangered	1		
Aves	Passeriformes	Corvidae	Corvus	Corvus florensis	True	Endangered	1		
Aves	Passeriformes	Corvidae	Corvus	Corvus validus	True	Near Threatened	1		
Aves	Passeriformes	Paradisaeidae	Semioptera	Semioptera wallacii	True	Least Concern	1		

Aves	Passeriformes	Paradisaeidae	Paradigalla	Paradigalla carunculata	True	Near Threatened					1
Aves	Passeriformes	Paradisaeidae	Epimachus	Epimachus fastosus		Least Concern					1
Aves	Passeriformes	Pityriasidae	Pityriasis	Pityriasis gymnocephala		Near Threatened					1
Aves	Passeriformes	Oriolidae	Oriolus	Oriolus xanthonotus		Near Threatened					1
Aves	Passeriformes	Oriolidae	Oriolus	Oriolus hosii		Near Threatened					1
Aves	Passeriformes	Oriolidae	Sphecotheres	Sphecotheres hypoleucus	True	Least Concern					1
Aves	Passeriformes	Oriolidae	Sphecotheres	Sphecotheres viridis		Least Concern					1
Aves	Passeriformes	Campephagidae	Coracina	Coracina bicolor	True	Near Threatened					1
Aves	Passeriformes	Campephagidae	Edolisoma	Edolisoma dispar	True	Least Concern					1
Aves	Passeriformes	Campephagidae	Lobotos	Lobotos lobatus		Vulnerable	1	1			
Aves	Passeriformes	Campephagidae	Pericrocotus	Pericrocotus igneus		Near Threatened					1
Aves	Passeriformes	Rhipiduridae	Rhipidura	Rhipidura fuscorufa	True	Near Threatened					1
Aves	Passeriformes	Rhipiduridae	Rhipidura	Rhipidura opistherythra	True	Near Threatened					1
Aves	Passeriformes	Dicruridae	Dicrurus	Dicrurus sumatranus	True	Near Threatened					1
Aves	Passeriformes	Lamproliidae	Eutrichomyias	Eutrichomyias rowleyi	True	Critically Endangered					1
Aves	Passeriformes	Monarchidae	Terpsiphone	Terpsiphone atrocaudata		Near Threatened					1
Aves	Passeriformes	Monarchidae	Symposiachrus	Symposiachrus sacerdotum	True	Endangered					1
Aves	Passeriformes	Monarchidae	Symposiachrus	Symposiachrus boanensis		Critically Endangered					1
Aves	Passeriformes	Monarchidae	Symposiachrus	Symposiachrus leucurus	True	Near Threatened					1
Aves	Passeriformes	Monarchidae	Symposiachrus	Symposiachrus julianae	True	Vulnerable					1
Aves	Passeriformes	Monarchidae	Symposiachrus	Symposiachrus brehmii	True	Endangered					1
Aves	Passeriformes	Monarchidae	Myiagra	Myiagra atra	True	Near Threatened					1
Aves	Passeriformes	Aegithinidae	Aegithina	Aegithina viridissima		Near Threatened					1
Aves	Passeriformes	Malaconotidae	Chlorophoneus	Chlorophoneus kupeensis		Endangered				1	
Aves	Passeriformes	Malaconotidae	Malaconotus	Malaconotus lagdeni		Near Threatened	1	1			
Aves	Passeriformes	Malaconotidae	Malaconotus	Malaconotus gladiator		Vulnerable				1	
Aves	Passeriformes	Platysteiridae	Batis	Batis minima		Least Concern				1	
Aves	Passeriformes	Platysteiridae	Platysteira	Platysteira laticincta	True	Endangered				1	
Aves	Passeriformes	Vangidae	Philentoma	Philentoma velata		Near Threatened					1
Aves	Passeriformes	Picathartidae	Picathartes	Picathartes gymnocephalus		Vulnerable	1	1			
Aves	Passeriformes	Picathartidae	Picathartes	Picathartes oreas		Near Threatened				1	
Aves	Passeriformes	Turdidae	Geokichla	Geokichla crossleyi		Least Concern				1	
Aves	Passeriformes	Muscicapidae	Melaenornis	Melaenornis annamarulae		Vulnerable	1	1			
Aves	Passeriformes	Muscicapidae	Eumyias	Eumyias additus	True	Near Threatened					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis umbratilis		Near Threatened					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis colonus	True	Near Threatened					1
Aves	Passeriformes	Muscicapidae	Muscicapa	Muscicapa segregata	True	Near Threatened					1
Aves	Passeriformes	Muscicapidae	Fraseria	Fraseria tessmanni		Least Concern	1	1	1		
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula rufigula	True	Near Threatened					1
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula henrici	True	Near Threatened					1
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula bonthaina	True	Endangered					1
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula timorensis		Near Threatened					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis sanfordi	True	Endangered					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis ruckii	True	Critically Endangered					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis caerulatus		Vulnerable					1
Aves	Passeriformes	Muscicapidae	Cyornis	Cyornis turcosus		Near Threatened					1
Aves	Passeriformes	Muscicapidae	Trichixos	Trichixos pyrropygus		Near Threatened					1
Aves	Passeriformes	Muscicapidae	Enicurus	Enicurus ruficapillus		Near Threatened					1
Aves	Passeriformes	Turdidae	Cochoa	Cochoa beccarii	True	Vulnerable					1
Aves	Passeriformes	Turdidae	Cochoa	Cochoa azurea	True	Vulnerable					1
Aves	Passeriformes	Muscicapidae	Saxicola	Saxicola torquatus		Least Concern	1			1	
Aves	Passeriformes	Sturnidae	Aplonis	Aplonis crassa	True	Near Threatened					1
Aves	Passeriformes	Sturnidae	Lamprotornis	Lamprotornis iris		Least Concern	1				
Aves	Passeriformes	Sturnidae	Hylopsar	Hylopsar cupreocauda		Near Threatened	1	1			
Aves	Passeriformes	Sturnidae	Leucopsar	Leucopsar rothschildi	True	Critically Endangered					1
Aves	Passeriformes	Sturnidae	Basilornis	Basilornis galeatus	True	Near Threatened					1

Aves	Passeriformes	Sturnidae	Streptocitta	Streptocitta albertinae	True	Near Threatened					1		
Aves	Passeriformes	Troglodytidae	Odontorchilus	Odontorchilus cinereus		Near Threatened						1	
Aves	Passeriformes	Troglodytidae	Henicorhina	Henicorhina leucoptera		Near Threatened							1
Aves	Passeriformes	Polioptilidae	Polioptila	Polioptila lactea		Near Threatened						1	
Aves	Passeriformes	Pycnonotidae	Pycnonotus	Pycnonotus zeylanicus		Critically Endangered					1		
Aves	Passeriformes	Pycnonotidae	Pycnonotus	Pycnonotus tympanistrigus	True	Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Microtarsus	Microtarsus melanoleucos		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Ixidia	Ixidia squamata		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Ixidia	Ixidia cyaniventris		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Euptilotus	Euptilotus eutilotus		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Arizelocichla	Arizelocichla montana		Least Concern				1			
Aves	Passeriformes	Pycnonotidae	Phyllastrephus	Phyllastrephus poliocephalus		Near Threatened				1			
Aves	Passeriformes	Pycnonotidae	Bleda	Bleda eximius		Near Threatened	1		1				
Aves	Passeriformes	Pycnonotidae	Criniger	Criniger olivaceus		Vulnerable	1		1				
Aves	Passeriformes	Pycnonotidae	Iole	Iole finschii		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Setornis	Setornis criniger		Vulnerable					1		
Aves	Passeriformes	Pycnonotidae	Iole	Iole charlottae		Near Threatened					1		
Aves	Passeriformes	Pycnonotidae	Ixos	Ixos malaccensis		Near Threatened					1		
Aves	Passeriformes	Cisticolidae	Schistolais	Schistolais leontica		Endangered	1						
Aves	Passeriformes	Cisticolidae	Apalis	Apalis bamendae	True	Least Concern				1			
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops flavus	True	Endangered					1		
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops grayi	True	Near Threatened					1		
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops uropygialis	True	Near Threatened					1		
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops mysorensis	True	Near Threatened					1		
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops kuehni	True	Near Threatened					1		
Aves	Passeriformes	Motacillidae	Madanga	Madanga ruficollis	True	Endangered					1		
Aves	Passeriformes	Zosteropidae	Heleia	Heleia muelleri		Near Threatened					1		
Aves	Passeriformes	Scotocercidae	Horornis	Horornis carolinae	True	Near Threatened					1		
Aves	Passeriformes	Locustellidae	Bradypterus	Bradypterus grandis		Near Threatened				1			
Aves	Passeriformes	Cisticolidae	Bathmocercus	Bathmocercus cerviniventris		Data Deficient	1						
Aves	Passeriformes	Acrocephalidae	Acrocephalus	Acrocephalus paludicola		Vulnerable			1				
Aves	Passeriformes	Cisticolidae	Poliolais	Poliolais lopezi		Least Concern				1			
Aves	Passeriformes	Locustellidae	Poodytes	Poodytes albolimbatus		Vulnerable					1		
Aves	Passeriformes	Leiotrichidae	Garrulax	Garrulax rufifrons		Critically Endangered					1		
Aves	Passeriformes	Pellorneidae	Pellorneum	Pellorneum rostratum		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Malacocincla	Malacocincla perspicillata	True	Data Deficient					1		
Aves	Passeriformes	Pellorneidae	Pellorneum	Pellorneum malaccense		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Malacopteron	Malacopteron affine		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Malacopteron	Malacopteron magnum		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Malacopteron	Malacopteron albogulare		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Illadopsis	Illadopsis rufescens		Near Threatened	1		1				
Aves	Passeriformes	Pellorneidae	Ptilocichla	Ptilocichla leucogrammica		Vulnerable					1		
Aves	Passeriformes	Pellorneidae	Kenopia	Kenopia striata		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Turdinus	Turdinus macrodactylus		Near Threatened					1		
Aves	Passeriformes	Pellorneidae	Turdinus	Turdinus atrigularis		Near Threatened					1		
Aves	Passeriformes	Timaliidae	Stachyris	Stachyris grammiceps	True	Near Threatened					1		
Aves	Passeriformes	Timaliidae	Stachyris	Stachyris leucotis		Near Threatened					1		
Aves	Passeriformes	Timaliidae	Stachyris	Stachyris nigricollis		Near Threatened					1		
Aves	Passeriformes	Timaliidae	Stachyris	Stachyris maculata		Near Threatened					1		
Aves	Passeriformes	Timaliidae	Macronus	Macronus ptilosus		Near Threatened					1		
Aves	Passeriformes	Alcippeidae	Alcippe	Alcippe brunneicauda		Near Threatened					1		
Aves	Passeriformes	Leiotrichidae	Kupeornis	Kupeornis gilberti		Vulnerable				1			
Aves	Passeriformes	Leiotrichidae	Laniellus	Laniellus albonotatus	True	Near Threatened					1		
Aves	Passeriformes	Dicaeidae	Prionochilus	Prionochilus thoracicus		Near Threatened					1		
Aves	Passeriformes	Dicaeidae	Dicaeum	Dicaeum everetti		Near Threatened					1		
Aves	Passeriformes	Nectariniidae	Anthreptes	Anthreptes rhodolaemus		Near Threatened					1		

Aves	Passeriformes	Nectariniidae	Cinnyris	Cinnyris ursulae		Least Concern		1				
Aves	Passeriformes	Nectariniidae	Aethopyga	Aethopyga duyvenbodei	True	Endangered			1			
Aves	Passeriformes	Melanocharitidae	Melanocharis	Melanocharis arfakiana		Least Concern			1			
Aves	Passeriformes	Motacillidae	Anthus	Anthus nattereri		Vulnerable					1	
Aves	Passeriformes	Ploceidae	Ploceus	Ploceus bannermani		Vulnerable		1				
Aves	Passeriformes	Ploceidae	Ploceus	Ploceus batesi	True	Endangered		1				
Aves	Passeriformes	Ploceidae	Ploceus	Ploceus hypoxanthus		Near Threatened			1			
Aves	Passeriformes	Ploceidae	Malimbus	Malimbus ballmanni		Near Threatened	1					
Aves	Passeriformes	Estrildidae	Paludipasser	Paludipasser locustella		Least Concern		1				
Aves	Passeriformes	Estrildidae	Lonchura	Lonchura vana	True	Vulnerable			1			
Aves	Passeriformes	Fringillidae	Spinus	Spinus siemiradzkii		Least Concern						1
Aves	Passeriformes	Passerellidae	Arremon	Arremon castaneiceps		Near Threatened						1
Aves	Passeriformes	Parulidae	Vermivora	Vermivora chrysoptera		Near Threatened						1
Aves	Passeriformes	Parulidae	Setophaga	Setophaga cerulea		Near Threatened						1
Aves	Passeriformes	Thraupidae	Conirostrum	Conirostrum bicolor		Near Threatened					1	1
Aves	Passeriformes	Thraupidae	Conirostrum	Conirostrum margaritae		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Conirostrum	Conirostrum binghami		Near Threatened						1
Aves	Passeriformes	Thraupidae	Orchesticus	Orchesticus abeillei	True	Near Threatened					1	
Aves	Passeriformes	Thraupidae	Neothraupis	Neothraupis fasciata		Near Threatened					1	
Aves	Passeriformes	Thraupidae	Conothraupis	Conothraupis speculigera		Near Threatened					1	1
Aves	Passeriformes	Thraupidae	Conothraupis	Conothraupis mesoleuca	True	Endangered					1	
Aves	Passeriformes	Thraupidae	Sericossypha	Sericossypha albocristata		Vulnerable						1
Aves	Passeriformes	Thraupidae	Bangsia	Bangsia flavovirens		Vulnerable						1
Aves	Passeriformes	Thraupidae	Nemosia	Nemosia rourei	True	Critically Endangered					1	
Aves	Passeriformes	Thraupidae	Tangara	Tangara cyanoptera	True	Near Threatened					1	
Aves	Passeriformes	Thraupidae	Tephrophilus	Tephrophilus wetmorei		Vulnerable						1
Aves	Passeriformes	Thraupidae	Wetmorethraupis	Wetmorethraupis sterrhopteron		Vulnerable						1
Aves	Passeriformes	Fringillidae	Euphonia	Euphonia chalybea		Near Threatened					1	
Aves	Passeriformes	Thraupidae	Tangara	Tangara fastuosa	True	Vulnerable					1	
Aves	Passeriformes	Thraupidae	Tangara	Tangara johannae		Near Threatened						1
Aves	Passeriformes	Thraupidae	Tangara	Tangara argyrofenges		Vulnerable						1
Aves	Passeriformes	Thraupidae	Dacnis	Dacnis nigripes	True	Near Threatened					1	
Aves	Passeriformes	Thraupidae	Dacnis	Dacnis berlepschi		Vulnerable						1
Aves	Passeriformes	Passerellidae	Oreothraupis	Oreothraupis arremonops		Least Concern						1
Aves	Passeriformes	Thraupidae	Charitospiza	Charitospiza eucosma		Near Threatened					1	
Aves	Passeriformes	Thraupidae	Coryphaspiza	Coryphaspiza melanotis		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Microspingus	Microspingus cinereus	True	Least Concern					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila frontalis		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila falcirostris		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila nigrorufa		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila ruficollis		Near Threatened					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila palustris		Endangered					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila hypochroma		Near Threatened					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila cinnamomea		Vulnerable					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila melanogaster	True	Near Threatened					1	
Aves	Passeriformes	Thraupidae	Sporophila	Sporophila maximiliani		Endangered					1	
Aves	Passeriformes	Thraupidae	Geospiza	Geospiza pauper	True	Critically Endangered						1
Aves	Passeriformes	Thraupidae	Geospiza	Geospiza pallida	True	Near Threatened						1
Aves	Passeriformes	Cardinalidae	Caryothraustes	Caryothraustes erythromelas		Least Concern					1	
Aves	Passeriformes	Thraupidae	Saltator	Saltator cinctus		Least Concern						1
Aves	Passeriformes	Thraupidae	Porphyrospiza	Porphyrospiza caerulescens		Near Threatened					1	
Aves	Passeriformes	Icteridae	Cacicus	Cacicus koepckeae		Near Threatened					1	
Aves	Passeriformes	Icteridae	Anumara	Anumara forbesi	True	Vulnerable					1	
Aves	Passeriformes	Locustellidae	Bradypterus	Bradypterus bangwaensis		Least Concern		1				
Aves	Strigiformes	Strigidae	Otus	Otus enganensis	True	Near Threatened			1			
Aves	Strigiformes	Strigidae	Otus	Otus alfredi	True	Endangered			1			

Aves	Passeriformes	Thamnophilidae	Myrmotherula	Myrmotherula snowi	True	Critically Endangered					1	
Aves	Cuculiformes	Cuculidae	Carpococcyx	Carpococcyx viridis	True	Critically Endangered				1		
Aves	Passeriformes	Thamnophilidae	Formicivora	Formicivora acutirostris	True	Near Threatened					1	
Aves	Passeriformes	Furnariidae	Synallaxis	Synallaxis cinerea	True	Near Threatened					1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes beckeri	True	Endangered					1	
Aves	Caprimulgiformes	Caprimulgidae	Nyctiphrynus	Nyctiphrynus rosenbergi		Near Threatened						1
Aves	Passeriformes	Furnariidae	Acrobatornis	Acrobatornis fonsecai	True	Vulnerable					1	
Aves	Passeriformes	Pachycephalidae	Coracornis	Coracornis sanghirensis	True	Critically Endangered				1		
Aves	Strigiformes	Strigidae	Glaucidium	Glaucidium nubicola		Vulnerable						1
Aves	Passeriformes	Thamnophilidae	Herpsilochmus	Herpsilochmus gentryi		Least Concern						1
Aves	Passeriformes	Grallariidae	Grallaria	Grallaria ridgelyi		Endangered						1
Aves	Accipitriformes	Accipitridae	Leptodon	Leptodon forbesi	True	Endangered					1	
Aves	Passeriformes	Icteridae	Xanthopsar	Xanthopsar flavus		Endangered					1	
Aves	Passeriformes	Tyrannidae	Phylloscartes	Phylloscartes sylviolus		Near Threatened					1	
Aves	Passeriformes	Tyrannidae	Pogonotriccus	Pogonotriccus eximius		Near Threatened					1	
Aves	Strigiformes	Strigidae	Otus	Otus beccarii	True	Vulnerable				1		
Aves	Passeriformes	Cotingidae	Phibalura	Phibalura flavirostris		Near Threatened					1	
Aves	Psittaciformes	Psittacidae	Psittacus	Psittacus erithacus		Endangered	1	1	1			
Aves	Passeriformes	Corvidae	Cissa	Cissa thalassina	True	Critically Endangered				1		
Aves	Galliformes	Phasianidae	Argusianus	Argusianus argus		Vulnerable				1		
Aves	Columbiformes	Columbidae	Ramphiculus	Ramphiculus epius	True	Least Concern				1		
Aves	Columbiformes	Columbidae	Ramphiculus	Ramphiculus mangoliensis	True	Near Threatened				1		
Aves	Columbiformes	Columbidae	Ducula	Ducula oenothorax	True	Near Threatened				1		
Aves	Piciformes	Ramphastidae	Ramphastos	Ramphastos vitellinus		Vulnerable					1	
Aves	Piciformes	Ramphastidae	Ramphastos	Ramphastos ariel	True	Endangered					1	
Aves	Piciformes	Ramphastidae	Ramphastos	Ramphastos culminatus		Vulnerable					1	1
Aves	Columbiformes	Columbidae	Treron	Treron aromaticus	True	Near Threatened				1		
Aves	Psittaciformes	Psittacidae	Trichoglossus	Trichoglossus forsteni	True	Endangered				1		
Aves	Psittaciformes	Psittacidae	Trichoglossus	Trichoglossus weberi	True	Near Threatened				1		
Aves	Psittaciformes	Psittacidae	Trichoglossus	Trichoglossus rosenbergii	True	Vulnerable				1		
Aves	Piciformes	Picidae	Celeus	Celeus torquatus		Near Threatened					1	
Aves	Piciformes	Picidae	Celeus	Celeus tinnunculus	True	Vulnerable					1	
Aves	Piciformes	Picidae	Picus	Picus dedemi	True	Near Threatened				1		
Aves	Piciformes	Picidae	Chrysocolaptes	Chrysocolaptes strictus	True	Vulnerable				1		
Aves	Coraciiformes	Alcedinidae	Ceyx	Ceyx cajeli	True	Near Threatened				1		
Aves	Caprimulgiformes	Trochilidae	Lophornis	Lophornis chalybeus		Near Threatened					1	
Aves	Coraciiformes	Alcedinidae	Actenoides	Actenoides monachus	True	Near Threatened				1		
Aves	Coraciiformes	Alcedinidae	Actenoides	Actenoides capucinus	True	Near Threatened				1		
Aves	Coraciiformes	Alcedinidae	Actenoides	Actenoides princeps	True	Near Threatened				1		
Aves	Coraciiformes	Alcedinidae	Cittura	Cittura cyanotis	True	Least Concern				1		
Aves	Coraciiformes	Alcedinidae	Cittura	Cittura sanghirensis	True	Near Threatened				1		
Aves	Coraciiformes	Alcedinidae	Alcedo	Alcedo euryzona		Critically Endangered				1		
Aves	Coraciiformes	Alcedinidae	Alcedo	Alcedo peninsulae		Near Threatened				1		
Aves	Piciformes	Picidae	Campephilus	Campephilus splendens		Near Threatened						1
Aves	Piciformes	Picidae	Meiglyptes	Meiglyptes tristis	True	Endangered				1		
Aves	Ciconiiformes	Ciconiidae	Ciconia	Ciconia episcopus		Near Threatened				1		
Aves	Galliformes	Cracidae	Pipile	Pipile grayi		Near Threatened					1	
Aves	Galliformes	Phasianidae	Lophura	Lophura erythrophthalma		Vulnerable				1		
Aves	Galliformes	Phasianidae	Lophura	Lophura pyronota		Vulnerable				1		
Aves	Galliformes	Phasianidae	Lophura	Lophura ignita		Vulnerable				1		
Aves	Galliformes	Phasianidae	Lophura	Lophura rufa		Vulnerable				1		
Aves	Psittaciformes	Psittacidae	Psittinus	Psittinus cyanurus		Near Threatened				1		
Aves	Psittaciformes	Psittacidae	Psittinus	Psittinus abbotti	True	Near Threatened				1		
Aves	Psittaciformes	Psittacidae	Amazona	Amazona festiva		Near Threatened					1	1
Aves	Strigiformes	Strigidae	Ninox	Ninox squamipila	True	Least Concern				1		
Aves	Strigiformes	Strigidae	Ninox	Ninox hypogramma	True	Least Concern				1		

Aves	Strigiformes	Strigidae	Ninox	Ninox hantu	True	Least Concern				1			
Aves	Strigiformes	Strigidae	Ninox	Ninox forbesi	True	Least Concern				1			
Aves	Coraciiformes	Alcedinidae	Actenoides	Actenoides regalis	True	Vulnerable				1			
Aves	Piciformes	Ramphastidae	Ramphastos	Ramphastos ambiguus		Near Threatened							1
Aves	Columbiformes	Columbidae	Otidiphaps	Otidiphaps aruensis	True	Vulnerable				1			
Aves	Columbiformes	Columbidae	Ramphiculus	Ramphiculus meridionalis	True	Vulnerable				1			
Aves	Piciformes	Ramphastidae	Pteroglossus	Pteroglossus bitorquatus	True	Endangered						1	
Aves	Piciformes	Ramphastidae	Pteroglossus	Pteroglossus sturmii		Near Threatened						1	
Aves	Columbiformes	Columbidae	Ramphiculus	Ramphiculus subgularis	True	Vulnerable				1			
Aves	Galliformes	Phasianidae	Rhizothera	Rhizothera longirostris		Near Threatened				1			
Aves	Columbiformes	Columbidae	Geotrygon	Geotrygon purpurata		Endangered							1
Aves	Psittaciformes	Psittacidae	Amazona	Amazona lilacina	True	Critically Endangered							1
Aves	Passeriformes	Pipridae	Antilophia	Antilophia bokermanni	True	Critically Endangered						1	
Aves	Passeriformes	Passerellidae	Arremon	Arremon franciscanus	True	Near Threatened						1	
Aves	Passeriformes	Conopophagidae	Conopophaga	Conopophaga cearae	True	Near Threatened						1	
Aves	Galliformes	Megapodiidae	Megapodius	Megapodius geelvinkianus	True	Near Threatened				1			
Aves	Passeriformes	Tityridae	Laniisoma	Laniisoma buckleyi		Near Threatened							1
Aves	Passeriformes	Estrildidae	Lonchura	Lonchura fuscata		Near Threatened				1			
Aves	Strigiformes	Strigidae	Otus	Otus siaoensis	True	Critically Endangered				1			
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops nehrkorni	True	Critically Endangered				1			
Aves	Strigiformes	Strigidae	Ninox	Ninox ios	True	Vulnerable				1			
Aves	Gruiformes	Rallidae	Gymnocrex	Gymnocrex talaudensis	True	Endangered				1			
Aves	Strigiformes	Strigidae	Otus	Otus sunia		Least Concern				1			
Aves	Passeriformes	Tyrannidae	Guyramemua	Guyramemua affinis		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Myiopagis	Myiopagis olallai		Least Concern							1
Aves	Struthioniformes	Tinamidae	Crypturellus	Crypturellus erythropus		Least Concern						1	
Aves	Strigiformes	Strigidae	Ninox	Ninox sumbaensis	True	Endangered				1			
Aves	Psittaciformes	Psittacidae	Amazona	Amazona diadema	True	Least Concern						1	
Aves	Piciformes	Picidae	Celeus	Celeus obrieni	True	Vulnerable						1	
Aves	Passeriformes	Pellorneidae	Pellorneum	Pellorneum buettikoferi	True	Near Threatened				1			
Aves	Accipitriformes	Accipitridae	Nisaetus	Nisaetus floris		Critically Endangered				1			
Aves	Passeriformes	Chloropseidae	Chloropsis	Chloropsis media	True	Endangered				1			
Aves	Accipitriformes	Accipitridae	Circaetus	Circaetus beaudouini		Vulnerable	1	1	1				
Aves	Strigiformes	Strigidae	Ninox	Ninox burhani	True	Near Threatened				1			
Aves	Passeriformes	Turdidae	Geokichla	Geokichla leucolaema	True	Near Threatened				1			
Aves	Passeriformes	Muscicapidae	Myophonus	Myophonus castaneus	True	Near Threatened				1			
Aves	Passeriformes	Rhinocryptidae	Scytalopus	Scytalopus robbinsi	True	Endangered							1
Aves	Passeriformes	Turdidae	Geokichla	Geokichla joiceyi	True	Near Threatened				1			
Aves	Passeriformes	Turdidae	Geokichla	Geokichla interpres		Endangered				1			
Aves	Passeriformes	Turdidae	Geokichla	Geokichla erythronota	True	Near Threatened				1			
Aves	Passeriformes	Thamnophilidae	Thamnophilus	Thamnophilus tenuepunctatus		Vulnerable							1
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura griseipectus	True	Endangered						1	
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura pfrimeri	True	Endangered						1	
Aves	Accipitriformes	Accipitridae	Circaetus	Circaetus gallicus		Least Concern	1	1	1	1			
Aves	Cuculiformes	Cuculidae	Cuculus	Cuculus saturatus		Least Concern				1			
Aves	Passeriformes	Estrildidae	Parmoptila	Parmoptila rubrifrons		Near Threatened	1	1					
Aves	Passeriformes	Icteridae	Sturnella	Sturnella magna		Near Threatened						1	
Aves	Passeriformes	Tyrannidae	Cnipodectes	Cnipodectes superrufus		Vulnerable						1	
Aves	Passeriformes	Thamnophilidae	Hypocnemis	Hypocnemis cantator		Least Concern						1	
Aves	Passeriformes	Thamnophilidae	Hypocnemis	Hypocnemis ochrogyna		Vulnerable						1	
Aves	Passeriformes	Thamnophilidae	Hypocnemis	Hypocnemis striata	True	Least Concern						1	
Aves	Passeriformes	Pittidae	Erythropitta	Erythropitta granatina		Near Threatened				1			
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops somadikartai	True	Near Threatened				1			
Aves	Passeriformes	Rhinocryptidae	Scytalopus	Scytalopus diamantinensis	True	Endangered						1	
Aves	Passeriformes	Furnariidae	Automolus	Automolus lammi	True	Endangered						1	
Aves	Psittaciformes	Psittacidae	Psittacus	Psittacus timneh		Endangered	1						

Aves	Coraciiformes	Meropidae	Merops	Merops mentalis		Near Threatened	1	1	1				
Aves	Passeriformes	Pittidae	Hydrornis	Hydrornis irena		Near Threatened				1			
Aves	Accipitriformes	Accipitridae	Buteo	Buteo rufinus		Least Concern			1				
Amphibia	Anura	Ceratobatrachidae	Alcalus	Alcalus rajae	True	Near Threatened				1			
Amphibia	Anura	Dendrobatidae	Ranitomeya	Ranitomeya sirensis		Least Concern					1		
Amphibia	Anura	Dicroglossidae	Occidozyga	Occidozyga tompotika	True	Critically Endangered				1			
Amphibia	Anura	Pelodryadidae	Litoria	Litoria gasconi		Least Concern				1			
Aves	Columbiformes	Columbidae	Goura	Goura sclaterii		Near Threatened				1			
Aves	Galliformes	Cracidae	Crax	Crax fasciolata		Vulnerable					1		
Aves	Galliformes	Cracidae	Crax	Crax pinima		Critically Endangered					1		
Aves	Galliformes	Phasianidae	Lophura	Lophura inornata	True	Near Threatened				1			
Aves	Coraciiformes	Alcedinidae	Ceyx	Ceyx fallax	True	Least Concern				1			
Aves	Coraciiformes	Alcedinidae	Ceyx	Ceyx sangirensis	True	Critically Endangered				1			
Aves	Piciformes	Bucconidae	Malacoptila	Malacoptila striata	True	Least Concern					1		
Aves	Piciformes	Bucconidae	Malacoptila	Malacoptila minor	True	Endangered					1		
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura leucotis	True	Vulnerable					1		
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura amazonum	True	Endangered					1		
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura snethlageae		Vulnerable					1		
Aves	Psittaciformes	Psittacidae	Pionus	Pionus reichenowi	True	Vulnerable					1		
Aves	Psittaciformes	Psittacidae	Amazona	Amazona farinosa		Near Threatened					1		1
Aves	Gruiformes	Psophiidae	Psophia	Psophia dextralis	True	Endangered					1		
Aves	Gruiformes	Psophiidae	Psophia	Psophia obscura		Critically Endangered					1		
Aves	Gruiformes	Psophiidae	Psophia	Psophia viridis		Vulnerable					1		
Aves	Gruiformes	Psophiidae	Psophia	Psophia crepitans		Least Concern					1		1
Mammalia	Rodentia	Muridae	Margaretamys	Margaretamys christinae	True	Endangered				1			
Mammalia	Rodentia	Ctenomyidae	Ctenomys	Ctenomys ibicuiensis	True	Data Deficient					1		
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys superciliaris		Least Concern	1	1	1				
Amphibia	Anura	Microhylidae	Microhyla	Microhyla malang		Least Concern				1			
Amphibia	Anura	Megophryidae	Leptobrachium	Leptobrachium waysepuntiense	True	Least Concern				1			
Amphibia	Anura	Centrolenidae	Hyalinobatrachium	Hyalinobatrachium pellucidum		Near Threatened							1
Mammalia	Rodentia	Muridae	Hylomyscus	Hylomyscus walterverheyeni		Least Concern			1				
Amphibia	Anura	Hylidae	Ololygon	Ololygon muriciensis	True	Critically Endangered					1		
Amphibia	Anura	Hylidae	Ololygon	Ololygon skuki	True	Endangered					1		
Amphibia	Anura	Petropedetidae	Petropedetes	Petropedetes parkeri		Data Deficient			1				
Mammalia	Paucituberculata	Caenolestidae	Caenolestes	Caenolestes sangay	True	Vulnerable							1
Mammalia	Carnivora	Felidae	Leopardus	Leopardus tigrinus		Vulnerable					1		1
Mammalia	Carnivora	Felidae	Felis	Felis silvestris		Least Concern		1	1				
Aves	Caprimulgiformes	Aegothelidae	Aegotheles	Aegotheles affinis		Data Deficient				1			
Aves	Coraciiformes	Alcedinidae	Ceyx	Ceyx wallacii	True	Near Threatened				1			
Aves	Accipitriformes	Accipitridae	Buteo	Buteo buteo		Least Concern	1						
Aves	Accipitriformes	Accipitridae	Circus	Circus spilonotus		Least Concern				1			
Aves	Strigiformes	Strigidae	Otus	Otus jolandae	True	Near Threatened				1			
Aves	Piciformes	Picidae	Chrysophlegma	Chrysophlegma humii		Near Threatened				1			
Aves	Piciformes	Picidae	Chrysophlegma	Chrysophlegma mentale	True	Near Threatened				1			
Aves	Cuculiformes	Cuculidae	Neomorphus	Neomorphus geoffroyi		Vulnerable					1		1
Aves	Strigiformes	Tytonidae	Tyto	Tyto almae	True	Data Deficient				1			
Aves	Psittaciformes	Psittacidae	Pionites	Pionites leucogaster	True	Endangered					1		
Aves	Psittaciformes	Psittacidae	Pionites	Pionites xanthomerius		Least Concern					1		
Aves	Psittaciformes	Psittacidae	Pionites	Pionites xanthurus	True	Vulnerable					1		
Aves	Psittaciformes	Psittacidae	Aratinga	Aratinga solstitialis		Endangered					1		
Aves	Strigiformes	Strigidae	Otus	Otus mendeni	True	Vulnerable				1			
Aves	Strigiformes	Strigidae	Otus	Otus sulaensis	True	Near Threatened				1			
Aves	Psittaciformes	Psittacidae	Psittacara	Psittacara frontatus		Near Threatened							1
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus vieirai	True	Data Deficient					1		
Mammalia	Primates	Callitrichidae	Saguinus	Saguinus ursulus	True	Vulnerable					1		
Mammalia	Carnivora	Procyonidae	Nasuella	Nasuella olivacea		Near Threatened							1

Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis mutabilis	True	Endangered							1
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus steindachneri		Critically Endangered			1				
Amphibia	Anura	Microhylidae	Callulops	Callulops biakensis	True	Least Concern					1		
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus njiomock	True	Critically Endangered			1				
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa occidentalis		Least Concern	1	1					
Amphibia	Anura	Pyxicephalidae	Pyxicephalus	Pyxicephalus edulis		Least Concern			1				
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa leucomystax		Least Concern			1				
Amphibia	Anura	Phyllomedusidae	Agalychnis	Agalychnis spurrelli		Least Concern							1
Amphibia	Anura	Centrolenidae	Espadarana	Espadarana audax		Least Concern							1
Amphibia	Anura	Centrolenidae	Espadarana	Espadarana prosoblepon		Least Concern							1
Amphibia	Anura	Hylidae	Dendropsophus	Dendropsophus frosti		Least Concern						1	
Amphibia	Anura	Craugastoridae	Noblella	Noblella personina	True	Endangered							1
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana centropeninsularis		Endangered					1		
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana siberu	True	Least Concern					1		
Amphibia	Anura	Ranidae	Chalcorana	Chalcorana parvaccola	True	Least Concern					1		
Amphibia	Anura	Ranidae	Pulchrana	Pulchrana rawa	True	Least Concern					1		
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus larinopygion		Least Concern							1
Amphibia	Anura	Hylidae	Hyloscirtus	Hyloscirtus criptico	True	Endangered							1
Amphibia	Anura	Dendrobatidae	Hyloxalus	Hyloxalus italoi		Least Concern							1
Amphibia	Anura	Hylidae	Boana	Boana tetete		Vulnerable							1
Amphibia	Anura	Megophryidae	Leptobrachium	Leptobrachium abbotti		Least Concern					1		
Amphibia	Anura	Megophryidae	Leptobrachella	Leptobrachella dringi		Least Concern					1		
Amphibia	Anura	Megophryidae	Leptobrachella	Leptobrachella gracilis		Least Concern					1		
Amphibia	Anura	Dicroglossidae	Limnonectes	Limnonectes larvaepartus	True	Least Concern					1		
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys amoropalamus		Least Concern					1		
Amphibia	Anura	Ranidae	Meristogenys	Meristogenys whiteheadi		Least Concern					1		
Amphibia	Anura	Microhylidae	Microhyla	Microhyla achatina	True	Least Concern					1		
Amphibia	Anura	Rhacophoridae	Polypedates	Polypedates pseudotilophus	True	Least Concern					1		
Amphibia	Anura	Rhacophoridae	Polypedates	Polypedates otilophus		Least Concern					1		
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus bengkuluensis	True	Vulnerable					1		
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus catamitus	True	Least Concern					1		
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus angulirostris		Near Threatened					1		
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus gauni		Least Concern					1		
Amphibia	Anura	Ceratobatrachidae	Alcalus	Alcalus baluensis		Least Concern					1		
Amphibia	Anura	Megophryidae	Leptobrachium	Leptobrachium hasseltii	True	Least Concern					1		
Amphibia	Anura	Arthroleptidae	Leptopelis	Leptopelis modestus		Least Concern			1				
Mammalia	Chiroptera	Hipposideridae	Hipposideros	Hipposideros ater		Least Concern					1		
Mammalia	Chiroptera	Pteropodidae	Balionycteris	Balionycteris maculata		Least Concern					1		
Mammalia	Chiroptera	Pteropodidae	Megaloglossus	Megaloglossus azagnyi		Least Concern	1	1					
Mammalia	Chiroptera	Pteropodidae	Megaloglossus	Megaloglossus woermanni		Least Concern	1	1	1				
Mammalia	Chiroptera	Pteropodidae	Myonycteris	Myonycteris leptodon		Least Concern	1	1					
Mammalia	Chiroptera	Pteropodidae	Scotonycteris	Scotonycteris zenkeri		Near Threatened			1				
Mammalia	Chiroptera	Pteropodidae	Scotonycteris	Scotonycteris occidentalis		Least Concern	1	1					
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys maculata		Least Concern	1	1	1				
Amphibia	Anura	Bufonidae	Sclerophrys	Sclerophrys pusilla		Least Concern			1				
Mammalia	Chiroptera	Molossidae	Eumops	Eumops wilsoni		Data Deficient							1
Mammalia	Chiroptera	Phyllostomidae	Dryadonycteris	Dryadonycteris capixaba	True	Data Deficient						1	
Mammalia	Chiroptera	Phyllostomidae	Lichonycteris	Lichonycteris obscura		Least Concern							1
Mammalia	Chiroptera	Phyllostomidae	Micronycteris	Micronycteris giovanniae	True	Data Deficient							1
Amphibia	Anura	Rhacophoridae	Rhacophorus	Rhacophorus indonesiensis	True	Vulnerable					1		
Mammalia	Chiroptera	Phyllostomidae	Lonchophylla	Lonchophylla cadenai		Data Deficient							1
Mammalia	Chiroptera	Phyllostomidae	Lonchophylla	Lonchophylla fornicata		Data Deficient							1
Mammalia	Chiroptera	Phyllostomidae	Sturnira	Sturnira bakeri		Least Concern							1
Mammalia	Chiroptera	Phyllostomidae	Sturnira	Sturnira koopmanhilli		Data Deficient							1
Mammalia	Chiroptera	Phyllostomidae	Sturnira	Sturnira perla	True	Data Deficient							1
Mammalia	Chiroptera	Phyllostomidae	Platyrrhinus	Platyrrhinus dorsalis		Least Concern							1

Amphibia	Anura	Craugastoridae	Craugastor	Craugastor longirostris		Least Concern								1
Amphibia	Anura	Megophryidae	Leptobrachella	Leptobrachella hamidi		Least Concern						1		
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus mariae		Least Concern								1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis incomptus		Least Concern								1
Amphibia	Anura	Odontobatrachidae	Odontobatrachus	Odontobatrachus arndti		Near Threatened	1							
Amphibia	Anura	Arthroleptidae	Cardioglossa	Cardioglossa nigromaculata		Least Concern				1				
Amphibia	Anura	Rhacophoridae	Rohanixalus	Rohanixalus nauli	True	Endangered						1		
Amphibia	Anura	Rhacophoridae	Rohanixalus	Rohanixalus baladika	True	Near Threatened						1		
Amphibia	Anura	Pipidae	Xenopus	Xenopus allofraseri		Least Concern				1				
Amphibia	Anura	Pipidae	Xenopus	Xenopus parafraseri		Least Concern				1				
Mammalia	Rodentia	Dasyproctidae	Dasyprocta	Dasyprocta punctata		Least Concern								1
Mammalia	Primates	Lorisidae	Perodicticus	Perodicticus potto		Near Threatened	1		1					
Mammalia	Primates	Cercopithecidae	Cercopithecus	Cercopithecus pogonias		Near Threatened				1				
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis pahuma	True	Endangered								1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis cedros	True	Endangered								1
Amphibia	Anura	Craugastoridae	Pristimantis	Pristimantis calcarulatus		Vulnerable								1
Mammalia	Chiroptera	Pteropodidae	Pteropus	Pteropus chrysoproctus	True	Vulnerable						1		
Mammalia	Rodentia	Cricetidae	Thomasomys	Thomasomys vulcani	True	Least Concern								1
Mammalia	Chiroptera	Vespertilionidae	Harpiocephalus	Harpiocephalus harpia		Least Concern						1		
Aves	Passeriformes	Pittidae	Erythropitta	Erythropitta inspeculata	True	Vulnerable						1		
Aves	Passeriformes	Pittidae	Erythropitta	Erythropitta palliceps	True	Endangered						1		
Aves	Passeriformes	Pittidae	Pitta	Pitta rosenbergii	True	Vulnerable						1		
Aves	Passeriformes	Thamnophilidae	Herpsilochmus	Herpsilochmus stotzi	True	Least Concern							1	
Aves	Passeriformes	Thamnophilidae	Hypocnemis	Hypocnemis rondoni	True	Least Concern							1	
Aves	Passeriformes	Thamnophilidae	Myrmornis	Myrmornis torquata		Least Concern							1	1
Aves	Passeriformes	Rhinocryptidae	Scytalopus	Scytalopus gonzagai	True	Endangered							1	
Aves	Passeriformes	Furnariidae	Deconychura	Deconychura longicauda		Least Concern							1	
Aves	Passeriformes	Furnariidae	Deconychura	Deconychura pallida		Near Threatened							1	1
Aves	Passeriformes	Furnariidae	Xiphorhynchus	Xiphorhynchus atlanticus	True	Vulnerable							1	
Aves	Passeriformes	Furnariidae	Campylorhamphus	Campylorhamphus multostriatus	True	Near Threatened							1	
Aves	Passeriformes	Tyrannidae	Zimmerius	Zimmerius chicomendesi	True	Near Threatened							1	
Aves	Passeriformes	Tyrannidae	Pyrocephalus	Pyrocephalus nanus	True	Vulnerable								1
Aves	Passeriformes	Oriolidae	Oriolus	Oriolus cruentus	True	Data Deficient						1		
Aves	Passeriformes	Campephagidae	Lalage	Lalage leucoptera	True	Near Threatened						1		
Aves	Passeriformes	Dicruridae	Dicrurus	Dicrurus modestus		Least Concern	1		1	1				
Aves	Passeriformes	Corvidae	Platysmurus	Platysmurus leucopterus		Least Concern						1		
Aves	Passeriformes	Corvidae	Platysmurus	Platysmurus aterrimus		Least Concern						1		
Aves	Passeriformes	Corvidae	Cyanocorax	Cyanocorax hafferi	True	Near Threatened							1	
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula dumetoria		Least Concern						1		
Aves	Passeriformes	Muscicapidae	Ficedula	Ficedula riedeli	True	Least Concern						1		
Aves	Passeriformes	Muscicapidae	Oenanthe	Oenanthe oenanthe		Least Concern		1		1				
Aves	Passeriformes	Chloropseidae	Chloropsis	Chloropsis cochinchinensis	True	Endangered						1		
Aves	Passeriformes	Thraupidae	Certhidea	Certhidea olivacea	True	Vulnerable								1
Aves	Passeriformes	Pycnonotidae	Hypsipetes	Hypsipetes platenae	True	Critically Endangered						1		
Aves	Passeriformes	Phylloscopidae	Phylloscopus	Phylloscopus collybita		Least Concern		1						
Aves	Passeriformes	Phylloscopidae	Phylloscopus	Phylloscopus misoriensis	True	Vulnerable						1		
Aves	Passeriformes	Phylloscopidae	Phylloscopus	Phylloscopus maforensis	True	Vulnerable						1		
Aves	Passeriformes	Hylocitreidae	Hylocitrea	Hylocitrea bonthaina	True	Endangered						1		
Aves	Passeriformes	Leiotrichidae	Phyllanthus	Phyllanthus rubiginosus		Near Threatened	1	1	1					
Aves	Passeriformes	Turdidae	Cichlopsis	Cichlopsis leucogenys	True	Endangered							1	
Aves	Passeriformes	Turdidae	Cichlopsis	Cichlopsis chubbi		Near Threatened								1
Aves	Passeriformes	Muscicapidae	Copsychus	Copsychus saularis		Least Concern						1		
Aves	Passeriformes	Timaliidae	Mixornis	Mixornis prillwitzi	True	Vulnerable						1		
Aves	Passeriformes	Cardinalidae	Amaurospiza	Amaurospiza moesta		Least Concern							1	1
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia salatana	True	Least Concern						1		
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia glis		Least Concern						1		

Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia hypochrysa	True	Data Deficient					1			
Mammalia	Scandentia	Tupaiidae	Tupaia	Tupaia ferruginea	True	Data Deficient					1			
Mammalia	Rodentia	Sciuridae	Hylopetes	Hylopetes sagitta	True	Data Deficient					1			
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus leucomus	True	Least Concern					1			
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus topapuensis	True	Near Threatened					1			
Mammalia	Rodentia	Sciuridae	Prosciurillus	Prosciurillus alstoni	True	Near Threatened					1			
Amphibia	Anura	Bufonidae	Sigalegalephrynus	Sigalegalephrynus minangkabauensis	True	Data Deficient					1			
Mammalia	Rodentia	Cricetidae	Cerradomys	Cerradomys scotti		Least Concern						1		
Mammalia	Rodentia	Cricetidae	Brucepattersonius	Brucepattersonius griserufescens	True	Data Deficient						1		
Mammalia	Rodentia	Muridae	Hybomys	Hybomys badius	True	Endangered			1					
Mammalia	Rodentia	Muridae	Hybomys	Hybomys eisentrauti	True	Endangered			1					
Mammalia	Carnivora	Canidae	Canis	Canis lupaster		Least Concern			1					
Mammalia	Primates	Hominidae	Pongo	Pongo tapanuliensis	True	Critically Endangered					1			
Mammalia	Primates	Hominidae	Pongo	Pongo abelii	True	Critically Endangered					1			
Amphibia	Anura	Ranidae	Abavorana	Abavorana luctuosa		Least Concern					1			
Amphibia	Anura	Bufonidae	Pelophryne	Pelophryne brevipes		Least Concern					1			
Amphibia	Anura	Hyperoliidae	Hyperolius	Hyperolius soror		Least Concern	1							
Amphibia	Anura	Phrynobatrachidae	Phrynobatrachus	Phrynobatrachus afiabirago	True	Critically Endangered		1						
Amphibia	Anura	Centrolenidae	Nymphargus	Nymphargus manduriacu	True	Critically Endangered								1
Amphibia	Anura	Bufonidae	Pelophryne	Pelophryne signata		Least Concern					1			
Amphibia	Anura	Phyllomedusidae	Cruziohyla	Cruziohyla calcarifer		Least Concern								1
Mammalia	Chiroptera	Vespertilionidae	Kerivoula	Kerivoula hardwickii		Least Concern					1			
Aves	Struthioniformes	Tinamidae	Nothura	Nothura maculosa		Least Concern						1		
Aves	Columbiformes	Columbidae	Turacoena	Turacoena sulaensis	True	Least Concern					1			
Aves	Columbiformes	Columbidae	Turacoena	Turacoena manadensis	True	Least Concern					1			
Aves	Strigiformes	Strigidae	Otus	Otus scops		Least Concern	1	1	1					
Aves	Piciformes	Picidae	Celeus	Celeus undatus		Least Concern						1		1
Aves	Psittaciformes	Psittacidae	Pyrrhura	Pyrrhura melanura		Least Concern						1		1
Aves	Psittaciformes	Psittacidae	Eclectus	Eclectus cornelia	True	Endangered					1			
Aves	Psittaciformes	Psittacidae	Eclectus	Eclectus riedeli	True	Vulnerable					1			
Aves	Psittaciformes	Psittacidae	Eclectus	Eclectus polychloros		Least Concern					1			
Aves	Passeriformes	Zosteropidae	Zosterops	Zosterops melanurus	True	Vulnerable					1			
Aves	Passeriformes	Phylloscopidae	Phylloscopus	Phylloscopus rotiensis	True	Near Threatened					1			
Mammalia	Primates	Atelidae	Lagothrix	Lagothrix lagothricha		Vulnerable						1		1
Mammalia	Primates	Callitrichidae	Saguinus	Saguinus niger	True	Vulnerable						1		
Mammalia	Primates	Cebidae	Saimiri	Saimiri cassiquiarensis		Least Concern						1		1
Mammalia	Primates	Cercopithecidae	Piliocolobus	Piliocolobus badius		Endangered	1							
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius spectrumgurskyae	True	Vulnerable					1			
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius niemitzi	True	Endangered					1			
Mammalia	Primates	Tarsiidae	Tarsius	Tarsius tarsier	True	Vulnerable					1			
Mammalia	Cetartiodactyla	Bovidae	Capricornis	Capricornis sumatraensis		Vulnerable					1			
Mammalia	Primates	Lorisidae	Nycticebus	Nycticebus menagensis		Vulnerable					1			
Mammalia	Primates	Lorisidae	Nycticebus	Nycticebus coucang		Endangered					1			
Mammalia	Primates	Callitrichidae	Mico	Mico munduruku	True	Vulnerable						1		
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus grovesi	True	Critically Endangered						1		
Mammalia	Primates	Pitheciidae	Plecturocebus	Plecturocebus parecis	True	Near Threatened						1		
Mammalia	Primates	Cebidae	Sapajus	Sapajus apella		Least Concern						1		1
Mammalia	Primates	Cercopithecidae	Erythrocebus	Erythrocebus patas		Near Threatened	1	1	1					
Mammalia	Primates	Cercopithecidae	Presbytis	Presbytis hosei		Vulnerable					1			
Aves	Passeriformes	Dicaeidae	Dicaeum	Dicaeum dayakorum		Data Deficient					1			
Mammalia	Proboscidea	Elephantidae	Loxodonta	Loxodonta cyclotis		Critically Endangered	1	1	1					
Mammalia	Proboscidea	Elephantidae	Loxodonta	Loxodonta africana		Endangered			1					
Aves	Accipitriformes	Accipitridae	Milvus	Milvus migrans		Least Concern	1	1	1		1			
Aves	Psittaciformes	Psittacidae	Tanygnathus	Tanygnathus sumatranus	True	Least Concern					1			
Aves	Passeriformes	Sturnidae	Aplonis	Aplonis circumscripta	True	Near Threatened					1			
Aves	Columbiformes	Columbidae	Ducula	Ducula aenea		Near Threatened					1			

Aves	Caprimulgiformes	Trochilidae	Oreotrochilus	Oreotrochilus cyanolaemus	True	Critically Endangered				1
Aves	Caprimulgiformes	Trochilidae	Campylopterus	Campylopterus largipennis		Least Concern			1	1
Aves	Caprimulgiformes	Trochilidae	Campylopterus	Campylopterus calcirupicola		Vulnerable			1	
Aves	Strigiformes	Strigidae	Glaucidium	Glaucidium sylvaticum		Least Concern		1		
Aves	Psittaciformes	Cacatuidae	Cacatua	Cacatua sulphurea		Critically Endangered		1		
Aves	Psittaciformes	Cacatuidae	Cacatua	Cacatua citrinocristata	True	Critically Endangered		1		
Amphibia	Anura	Conrauidae	Conraua	Conraua sagyimase	True	Critically Endangered	1			

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