Delineation of
Key Biodiversity Areas
New Caledonia

Source Relief: DTSI 2011

April 2011

New Caledonia ecosystem profile initiative main holders

New Caledonia ecosystem profile members and data providers

Identification des sites cles de biodiversite en Nouvelle-Calédonie
Avec le soutien financier de :

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KBA Delineation

The delineation of Key Biodiversity Areas was initially discussed in October/November 2008 with local CI staff in Noumea, New Caledonia. After final project approval the grant agreement was signed in March 2009. Due to longer preparation time and other delays, a first work plan meeting was held in Cairns, November 2009 with CI. A first extensive visit had been undertaken to New Caledonia in March/April 2010 (4 weeks), then July 2010 (two weeks) and a third time for over three weeks in September/October 2010. After meeting associated partners, institutions and researchers project outlines were defined, and a longer period of identifying, tracing and sourcing required data followed. Then data formatting and processing took up a long period of work. This led to building a textual relational database being linked to the prepared and thematically organised spatial data. Queries and analysis could then be conducted in text and spatial form. Some analysis was conducted using spatial databases where text and spatial data could be stored and linked and spatially queried (e.g. postgres/postgis). Fire modelling was performed using statistical application (R, r-project.org). KBA draft ideas were presented twice to stakeholders and partners and the concerns and views incorporated into this analysis as much as possible.

Field trips to Province Nord were conducted as well as visits to various institutions and organisations. The Government of Province Nord, the Direction du Développement Economique et de l'Environnement, the Direction des Systemes d'Information Service Informations et Methodes, and the Service de Forêt were very helpful in data retrieval and assistance in methodological approaches . Other Gouvernment Institutions visited were Institut Agronomique néo-Calédonien (investigation on mammals), University of New Caledonia (botanical information), WWF, IRD, and independent environmental consultancies (such as Bureau d'Etudes et de Recherches biologiques, C. Poellabauer). Province Sud was also very cooperative in providing advice and establishing contacts to relevant information sources.

Through various intensive brain-storming sessions with CI a first version of the KBA delineation has been compiled looking at all species and environmental data available, incorporating expert advice and stakeholders' views on species protection and conservation measures. The delineation of Key Biodiversity Areas concentrated on recorded observations of threatened species, both IUCN-declared threatened, and locally described as threatened. Furthermore, the delineation also considered the very special New Caledonian environmental characteristics hosting rare, distinct species and often described as a main source for high endemism. The marine environment has been looked at as well, however observation data was not sufficient enough to derive KBAs/site-scale based biodiversity conservation areas. Existing delineated marine data such as registered World Heritage data, areas suggested through ecoregional assessemtns and suggested dugong protection zones are presented forming the base for further discussion in the marine KBA delineation process.

22 confirmed Key Biodiversity Areas have been delineated within New Caledonia, covering an area of 769,225.47 ha, and 42% of the New Caledonian territory. Small scattered and isolated KBA patches were identified and declared as candidate KBAs, covering 37,048.37 ha and a small percentage of 2% of the territory.

The first draft of this delineation was presented to main stakeholders, and was generally accepted. It represents a so far maximum approach of key biodiversity area definition. Following the iterative process of biodiversity delineation, further participative consultations are likely to take place and might bear the potential of outlining more refined individual key biodiversity areas, this also in regard to establishing a conservation network throughout the landscape of New Caledonia.

Confirmed and candiate Key Biodiversity Areas are shown in Figure 1.

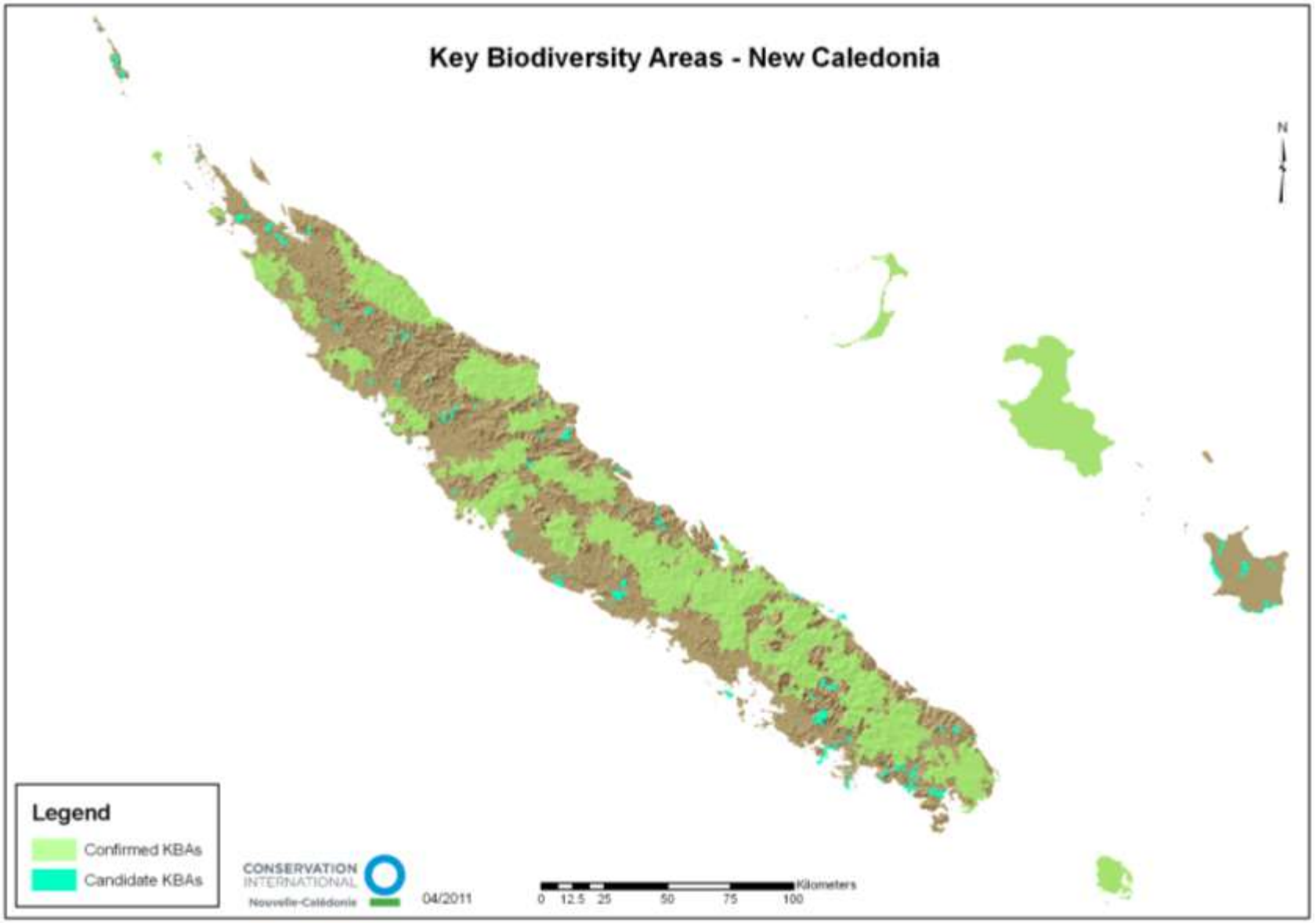

Fig.1 delineated KBAs in New Caledonia as of April 2011.

Methods

The methodology of delineation of Key biodiversity areas (KBAs) followed the concept outlined in Langhammer et al. (2007)[1], describing an approach for establishing a global standard for the identification of sites of global biodiversity significance based on vulnerability and irreplaceability.

KBAs are site/habitat scale outcomes based on specific criteria, being threatened species, restricted range species, significant congregations with standardised thresholds defined by IUCN. KBAs ultimately set targets for Protected Area networks, and their progress is monitored through Protected Area gazettal and the development and implementation of management plans.

Confirmed KBAs are a first step to be focused on producing in this analysis, based on known observation/collection points of threatened and restricted range species. The criteria for developing confirmed KBAs are the following:

Criterion Vulnerability

Vulnerability is based on presence of species populations with high probability of extinction in short- to medium-term future. The sites are characterised by regular occurrence of one or more CR (critically endangered), EN (endangered), or VU (vulnerable) species (Langhammer et al., 2007). The confirmed KBAs are triggered by each individual species, classed as "CR" or "EN", observed at a geographically confirmed and identifiable location.

- Globally Threatened Species

    i. Site with confirmed presence of CR or EN species

    ii. >10 pairs or 30 individuals of VU species

These species occurrences trigger confirmed KBA areas.

Criterion Irreplaceability

Irreplaceability refers to the extent to which areas can be replaced by or substituted for others (C. Marguels and S. Sakar, 2007)[2].

- Restricted Range Species

    Restricted Range refers to geographic processes that create or drive endemism. The habitat specificity is also an important element of restricted range. Restricted Range areas are a representation of geographically concentrated species that depend on network of irreplaceable sites within at least part of range or life cycle. These are sites that are regularly holding one or

[1] Langhammer, P.F., Bakarr,M.I., Bennun, L.A., Brooks, T.M., Clay, R.P., Darwall,W., De Silva, N., Edgar, G.J., Eken, G., Fishpool, L.D.C.,3 Fonseca, G.A.B. da, Foster, M.N., Knox, D.H., Matiku, P., Radford, E.A., Rodrigues, A.S.L., Salaman, P., Sechrest, W., and Tordoff, A.W. (2007). Identification and Gap Analysis of Key Biodiversity Areas: Targets for Comprehensive Protected Area Systems. Gland, Switzerland: IUCN.

[2] Marguels, C. and Sakar, S. (2007). Systematic Conservation Planning, Cambridge University Press, Cambridge

more restricted-range species (Langhammer et al., 2007). Range restriction tends to be based on geographic patterns rather than habitat types. The restricted range criterion offers the possibility to address species conservation in a timelier rapid manner. This is of particular advantage regarding the time lags of vulnerable species being assessed on the International Red List.

i. Site containing all or most RR species (global range<50,000sqkm) of the area in question (in this case, of New Caledonia)

ii. Site containing 5% global population of RR species underrepresented in other KBA's

- Bioregional Restricted Assemblages
  Sites holding a significant proportion of the group of species whose distributions are restricted to a biome or subdivision of it. Bioregional Restricted Assemblages trigger KBAs if they are areas of high uniqueness in their species assemblages (plant/animal communities). This can clearly cover many remaining dry forest patches in New Caledonia.

  i. Site containing a significant component (no numerical threshold) of the biota of the region in question (ie. high alpha diversity)

  ii. Site containing unusual species assemblages underrepresented by KBA's generated by previous criteria (eg. Mangroves/Dry Forest)

- Globally significant Congregations
  Sites holding large proportions of the global population of a species at a given time (e.g. breeding colonies, foraging and roosting sites). Spawn zones (e.g. Province Nord, New Caledonia) can fulfil this criterion.

  i. Site that holds on a regular basis >1% of biogeographic population of a congregatory waterbird (list as per Delaney & Scott 2002)

  ii. Site that holds on a regular basis >1% of biogeographic population of any congregatory species

  iii. Site known or thought to hold on a regular basis >20,000 individuals of single or mixed species

  iv. Sites known or thought to exceed thresholds at bottleneck sites for migratory species (ie staging sites)

Candidate KBAs are for sites beyond the confirmed KBA set. Their delineation is determined by known restricted range species (1% population threshold) and threatened species localities, they are also site scale outcomes (i.e. they set targets for Protected Area network establishment). Such candidate KBA sites can be defined by predicted habitat (from modelling or expert guesswork) of threatened and restricted range species, but are basically sites that are suspected to be important in the context of KBA criteria, and for which no data currently exists.

In New Caledonia land cover such as dry forest or mangroves (protected in Province Sud) range as Candidate KBAs.

Confirmed KBAs and candidate KBAs are not to be confused with corridors which are at a larger scale and are for landscape/seascape scale conservation, defined by multiple-use, land-use planning, ecosystem service protection, and habitat requirements of wide-ranging "landscape species".

Landscapes definitions are following the approaches:

1. Major habitat types (e.g. coastal reef and forest corridor, dry forest corridor, humid forest corridor, ultrabasic maquis corridor)

2. Just take the whole of Grande Terre as a giant global conservation priority, and have the corridor plan define the key ecosystem components within this.

Delineation Process

The KBA delineation followed the approach of identification of Key Biodiversity Areas the suggested by by Langhammer et al, 2007. CR/EN species immedialtely trigger KBA areas. In addition species of national priority, vulnerability status (VU) or restricted range were considered for selection being integrated into *confirmed KBA* area patches if adjacent or in close proximity. This especially accounts for VU species not being included in the coverage of first CR/EN selected areas, derived as a result from complementarity analysis. IBAs with threatened DR/EN bird species or protected areas containing CR/EN species observations triggered underlaying planning units designed for this conservation planning exercise. Individual Bird point data was also inspected and a few observation points of CR/EN bird being recorded outside of IBAs were included in KBAs during the delineation process.

Further, *add-on areas* were selected as being part of confirmed KBAs. Added on areal units to confirmed KBAs where selected based on locally important environmental parameters, such as geology (e.g. Péridotites/ Serpentinites), humid and dry forest cover (high endemic biodiverisity value), endangered reptile habitat ranges (not a per-se trigger), water protection sites (officially declared) and distribution of customary land tenure. Humid forest data was included all humid forest features with equal to or larger than 50ha.

Selected environmental areas highlighted in research work of the local research (e.g. IRD) highlighting endangered species habitat such as specific geology (ultramorfic substrate), altitude and rainfall characteristics were considered as relevant for conservation purposes, and therefore included into confirmed KBAs. Also a four criteria model calculating estimated habitat locations for endangered plant species (based on their observed location in the landscape). This was useful when considering KBA area refinement. The process of selecting add-on areas also contributed to maximising the compactness of confirmed KBA shapes, and was approved through various stakeholder meetings.

All spatially scattered and fragmented CR/EN species occurrence triggered areas that where classed as *candidate* KBAs.

Land tenure

Land ownership data was obtained from the New Caledonian government (DITTT). Areas of ownership could be mapped, such as state owned land, provincial owned land, private and traditionally owned areas. Land ownership data for Province des Iles Loyauté was not available.

Corridors

When thinking of **Corridor** definitions several points will have to be taken into account:

1. Viable habitat extent of wide-ranging or low-density population species needing a landscape beyond KBA scale to sustain their population
2. Intact ecological gradients across ecotones, altitudes, latitudes (terrestrial and marine), i.e. good beta diversity
3. Key water catchments for freshwater security for major human population areas and freshwater ecosystems
4. Reef to ridge linkages
5. Extensive areas of forest for carbon security
6. Priority areas for reafforestation (carbon security again)
7. Important ecotourism areas dependent upon natural assets

The design of corridors will have to follow after the delineation of KBAs.

Planning Unit design

The idea of using planning units is a proven concept often used in conservation planning. The planning units subdivide the landscape, and are used assessing the importance of biodiversity measures and for achieving conservation targets (Cowling et al, 2002)[3]. The units mainly represent sub-catchment areas (sous-basins), and thus follow relief forms and major contours in the landscape. For New Caledonia it was also advantageous to choose such delineations since many political boundaries (Province Sud/Nord) basically follow mountain ridges and on occasion, river stretches. These river sections were used to subdivide corresponding units. Also, Important Bird Areas (IBAs) are delineated according to catchment/river lines, and therefore supported the idea of using planning units as sub-catchment level areas following major landforms in the landscape.

The creation of planning units was based on hydrologic modelling and terrain analysis using a digital elevation model (DEM, or MNT). The DEM employed for the analysis was 50m raster data obtained from DTSI, Noumea. The publicly available 30m Aster DEM was also considered, however due to processing resources and other concerns in terms of accuracy, the 50m DEM was chosen.

Two preliminary steps were conducted for the planning unit design:

- DEM preconditioning: A fill command produced levelling out so called 'sinks' in the DEM. Sinks are often irregular over or undershoots, mainly resulting from sporadic errors of measurement. This generated a 30m DEM that does not contain any discontinuities.

The 'filled' DEM was then employed for further water catchment and basin calculation.

- Slope: A slope layer was produced deriving a slope raster with inclination information (a projected DEM therefore was needed deriving metric units). The slope dataset helped identifying areas with less than 0.1 degree inclination, resulting in 'flat' area layer.

The catchment model process allows generating sub-catchment units on user defined size. After calculating flow direction and flow accumulation (based on cell-by -cell level using elevation values) a stream network is computed. Thereby a threshold value is set indicating that cells are part of the stream network if at least a specified amount of cells are flowing (draining) into them. This ensures the creation of catchment areas on a refined scale. The accumulation number chosen was 500 in this model, i.e. indicating that at least 500 cells are required as accumulated flow for the target cell to be defined as a 'stream' cell. This resulted in around 10,700 sub-catchment units for New Caledonia (average size of 155 ha), but also revealed that coastal areas were not considered in this calculation as accumulated flow was below 500 cells. Therefore an additional layer was generated, calculating water basins complementing the catchment layer. Basins are also considered as catchments draining to a common outlet, however not considering accumulated flow. The planning layer design focused on a relatively compact shape of singular units. Since these basin areas can become very small, especially around coastal zones, all basin units smaller than 3.5 ha were dissolved (merged when spatially adjacent) and all areas less than 0.2 hectare eliminated, being merged to neighbouring largest polygon. This reduced the amount of basin units significantly. Covering the entire landmass

[3] Cowling, R.M., Pressey, R.L., Rouget, M., Lombard, A.T. (2003). A conservation plan for a global biodiversity hotspot – the Cape Floristic Region, South Africa. Biological Conservation 112 (2003), p. 191-216

of New Caledonia Areas with planning units, the sub-catchment layer was then complemented with the derived basin unit layer.

Since areas with low slope inclination (flat areas) confuse the calculated flow of direction and accumulation, the calculation of catchment units often phases out into sliver-like elongated, linear shapes, resulting in rather undesired delineations (Fig. 2, left). Therefore an overlay of the computed 'flat areas' on the catchment model output was undertaken in order to remove these linear shapes of polygons. The largest flat area was identified representing Lac de Yaté (2365 ha), in the south of Grand Terre (Province Sud). This area was then incorporated into the Planning Unit layer (Fig. 2).

Fig.2 Missing flow direction information result in undesired slivers (left); dissolving these flat areas provide a better representation of flow characteristics (right).

The planning units so far then resulted in a total of around 20,189 units (average size of 90 ha).

Species

Observation data of 481 species was employed for the delineation of KBAs. This included 83 bird species being recorded in 28 IBAs, 6 bulimes/snails, observations for 111 reptile species (a few of them not clearly identified and as such left out), field data for 11 fish and 7 crustacean species, 4 *Megachiroptera* (flying foxes) and 3 *Microchiroptera* (bats) species as well as observation points for 256 plant species.

Threatened Species covered by confirmed and candidate KBAs are listed in Annex I.

Birds

The Societe Caledonienne d'Ornithologie (SCO), affiliated with Birdlife International, provided all ornithological relevant information[4]. Spatial data such as Important Bird Area (IBA) delineations, and corresponding Bird species information in tabulated form had made available. Overall 30 IBAs were registered for New Caledonia, covering a total area of 662,380 ha (Minimum 13,000 ha and maximum 170,680 ha). 3 out of these 11 IBAs are offshore, within marine environment (îlots de Poindimié, îlots du Nord Ouest, îlots du Lagon Sud). The terrestrial IBAs mainly follow mountain ridges, and therefore water catchment boundaries, as well as river stretches. The accuracy of the IBA demarcations could be improved through replacing boundaries with catchment and river line data in consultation with ornithologist expert knowledge. Table 1 shows all IBAs and associated number of bird species recorded by SCO as well as the three endangered species Cagou/Kagu (*Rhynochetos jubatus*, EN), Méliphage toulou/ Crow Honeyeater (*Gymnomyza aubryana*, CR) and Perruche d'Ouvéa/ Ouvea Parakeet (*Eunymphicus uvaeensis*, EN). The latter triggered the *Ile d'Ouvea* as a whole KBA.

Table 1. Bird Species within IBAs

Bird Species Count	*Bird Species Observed, Status*	Name of IBA
43	*Rhynochetos jubatus, EN*	Aoupinié
39	*Rhynochetos jubatus, EN*	Arago
21	*Rhynochetos jubatus, EN*	Boulinda
1	*Rhynochetos jubatus, EN*	Cidoa-Bwa Bwi
22	*Rhynochetos jubatus, EN*	Dent de St Vincent
44	*Rhynochetos jubatus, EN*	Entre Mont Do et Mont Nakada
38	*Rhynochetos jubatus, EN*	Entre Mont Rembaï et Mont Canala
38	*Rhynochetos jubatus, EN*	Entre Plateau Dogny et Mont Canala
32		Fonds vallée Amoa et Goro Je
41	*Rhynochetos jubatus, EN*	Forêt Plate
34	*Rhynochetos jubatus, EN*	Goro Até et fonds de la Tchamba

[4] Jerôme Spaggiari, Vivien Chartendrault, Nicols Barré, 03/2007. Zones importantes pour la conservation des oiseaux de Nouvelle-Calédonie, Société calédonienne d'ornithologie, Bird Life International.

Bird Species Count	*Bird Species Observed, Status*	Name of IBA
44	*Rhynochetos jubatus, EN*	Houaïlou-Néoua
23		Humboldt-Kouakoué
8		îlots de Poindimié
13		îlots du lagon Sud
15		îlots du Nord Ouest
22	*Rhynochetos jubatus, EN*	Koum
24		Lifou
38	*Rhynochetos jubatus, EN*	Massif des Lèvres
35	*Rhynochetos jubatus, EN*	Nassirah
37	*Rhynochetos jubatus, EN*	Nord Me Maoya
44	*Rhynochetos jubatus, EN*	Nord Mont Nakada
15	*Eunymphicus uvaeensis, EN*	Ouvéa
41	*Gymnomyza aubryana, CR*	Panié
28	*Rhynochetos jubatus, EN*	Pic Ningua
42		Pindaï
29	*Rhynochetos jubatus, EN*	Prokoméo
37	*Rhynochetos jubatus, EN*	Sud Me Maoya
41	*Rhynochetos jubatus, EN*	Table Unio
18		Yandé

Other endangered Species listed internationally as endangered in New Caledonia are Egothèle calédonien / New Caledonian Owlet-Nightjar (*Aegotheles savesi*, CR) , Lori à diadème/ New Caledonian Lorikeet (*Charmosyna diadema*, CR), Râle de Lafresnaye/ New Caledonian Rail (*Gallirallus lafresnayanus*, CR). However, these species have not been observed or recorded by SCO.

New Caledonia IBAs are at a scale that ranges broadly between site and landscape, and while officially the IBAs should be interchangeable with KBA's, it has to be observed in the longer term whether governments are willing to set national protected area network targets at that scale, or whether such scale will be politically impossible and better marketed and managed under a corridor approach.

Mammals

The class 'mammals' in this biodiversity analysis of New Caledonia was focusing on the order *Chiroptera*, the two main sub-order: *Megachiroptera* - Flying Foxes and *Microchiroptera* - 'Microbats'.

Most of the *Chiroptera* covered in this analysis are Restricted Range species, and all *Microchiroptera* recorded are internationally considered as CR, or EN. Almost all *Megachiroptera* are internationally classed as VU (IUCN, 2010). In this context, the Restricted Range criterion is based on extent of occurrence (range) rather than area of occupancy (habitat). The *Chiroptera*, especially *Megachiroptera*, are also considered as landscape species. There is a considerable spatial variability of colonial roosting species having 'camps' (mostly trees where they roost in great numbers), mainly due to the fact that these camp sites can change over years as seasons or habitats change. This means camp locations are not permanently fixed, and as these species feed across the whole landscape, they cannot be protected at the site level alone. However, they can be assisted through landscape management via corridor-scale outcome, and species-specific actions such as enforcement of hunting laws (Langhammer et al., 2007).

Megachiroptera

The flying foxes observed are *Pteropus ornatus*, *Pteropus tonganus*, *Notopteris Neocaledonica*, and *Pteropus Vetulus*. The data was made available by Province Nord, DEEE, and covers nesting and camp site localities of Flying Foxes within Province Nord area conducted by several observers.

The species Ornate Flying Fox (*Pteropus ornatus*, VU) and Insular Flying-fox or Pacific Flying Fox (*Pteropus tonganus*) have been recorded under one category and observations were represented in the obtained dataset with same point features. It appears these two species do occur in the general areas of each other's camps, and are sympatric as they have been observed sharing same trees[5], with the *Pteropus tonganus* generally being sighted on the highest branches. *Pteropus ornatus* is classified VU because of population decline in the 1960's and endemism[5]. *Pteropus tonganus* is widespread from Solomon Islands to Cook Islands and while locally endangered in parts of its range, it is generally common[6]. *Pteropus tonganus* is therefore not a suitable species for KBA triggering as it is not categorised as a national conservation priority of New Caledonia. Also *Pteropus ornatus* nesting/camp site observations were not considered in the KBA analysis as it was unclear how to distinguish between the two mentioned species being both recorded with same point locations. The species New Caledonia Flying Fox (*Pteropus Vetulus*, VU) and the New Caledonia blossom bat (*Notopteris Neocaledonica*, VU) were both part of the observation dataset and nesting/camp sites

[5] Sanborn and Nicholson (1950). "Bats from New Caledonia, the Solomons Islands, and New Hebrides." Fieldiana Zoology 31(36): 313-338.

[6] Pierson E. D. and Rainey W. E. (1992). The biology of flying foxes of the genus Pteropus: a review. Biological 0report. 90 (23). 17 pp

mapped out inidividually. It was decided that corresponding observation sites of both species generate confirmed KBAs, as they are both classed as endemic and of National Priority (Code de l'Environment, 2009)[7]. In addition, *Notopteris Neocaledonica* is together with *Notopteris macdonaldi* of Fiji phylogenetically important, representing a Genus with only two species. The three observation points of *Notopteris Neocaledonica* were located in mangrove areas, dry forest and in humid forest/IBA (Entre Mont Do et Mont Nakada). Areas within mangroves and dry forest resulted in confirmed KBA locations, same as of course within the IBA. 13 out of the 15 locations of *Pteropus Vetulus* are situated within humid forest areas, and one of them in a dry forest patch. None of these 15 point observations were within IBAs.

Microchiroptera

Fabrice M. Brescia, Institut Agronomique néo-Calédonien (IAC), Programme Elevage et Faune Sauvage) contributed observation data on *Microchiroptera*, but also in addition to Roger James (CI, Atherton, AU) provided helpful information on *Megachiroptera* (7/2010).

The species New Caledonian Long-eared Bat (*Nyctophilus nebulosus*, CR), Loyalty Bent-Winged Bat (*Miniopterus robustior*, EN) are the observed *Microchiroptera* in New Caledonia. *Miniopterus robustior* was exclusively recorded in Loyalty Islands, and *Nyctophilus nebulosus* in Southern Province, south of Noumea, close to the Protected Area 'Foret de la Thy'. Observation data for *Chalinolobus neocaledonicus* (EN) could not be sourced.

[7] DDEE Province Nord, 2009, Code de l'Environment, Editopn 2009, Gourvernement Nouvelle Caledonie ; DENV Province Sud, 2009, Code de l'Environment, Editopn 2009, Gourvernement Nouvelle Caledonie

Bulimes/Snails

The observation data of Gastropods in New Caledonia is based on a Publication of the Paris Natural History Museum[8]. The Gastropoda, Mollusca species described are the land snails of Genus Placostylus of the family Bulimulidae.

The observations of land snails (bulimes) were provided with x/y coordinates, and mapped out for the analysis, and are shown in Table 2 below. Insufficiently described species and geographic location data was dismissed. Thus, 174 locations could be identified and georeferenced, including 6 species of the Genus *Placostylus* (Table 2). Apart from *Placostylus porphyrostomu*, 5 species are locally regarded as CR or EN, triggering confirmed KBA sites. 3 species are internationally recognised as VU. The species distribution is wide spread over New Caledonia, in Grand Terre throughout North to South, and points are also located on Ile des Pins and Loyality Islands.

Table 2. Bulimes/Snail species part of the observation data

Species	RedList_Current	RedList_Proposed	RR
Placostylus bondeensis		CR	RR
Placostylus caledonicus		CR	RR
Placostylus eddystonensis	VU	CR	RR
Placostylus fibratus	VU	EN	RR
Placostylus porphyrostomus	VU		RR
Placostylus scarabus		CR	RR

The species *Placostylus fibratus* and *Placostylus porphyrostomus* are relevant in terms of importance for food. According to Fabrice M. Brescia et al. (2007) [9] *Placostylus porphyrostomus* is the most common species in dry sclerophyllous forests being the dominant vegetation type in dry areas on the west coast of the mainland. *Placostylus fibratus* is the most polymorphic species and is found throughout New Caledonia, including the Loyalty Islands where a smaller dwarf form occurs. This species is edible and known as 'the snail of the Isle of Pines'. Threats for the two species are various: "*Placostylus fibratus* is favoured as food, and as a result, has been over-collected from the wild, while *Placostylus porphyrostomus* is threatened by habitat modification and destruction and by predation by introduced rodent" (Fabrice M. Brescia et al. (2007)[1].

The above listed 6 species were further described and 16 subspecies within this cluster identified, according to Eike Neubert, Corinne Cherl-Mora & Phillipe Bouchet (2009):

- Placostylus bondeensis bondeensis (Crosse & Souverbie, 1869)
- Placostylus bondeensis rossiteri (Brazier, 1881)
- Placostylus caledonicus (Petit, 1845)
- Placostylus eddystonensis eddystonensis (L. Pfeiffer, 1855)

[8] Eike Neubert, Corinne Cherl-Mora and Phillipe Bouchet, 2009. Bulimes. Museum National d'Histoire Naturelle, Paris, in: Zoologia Neocaledonica 7, publication scientifique du Museum, 2009

[9] Fabrice M. Brescia, Christine Pöllabauer, Murray A. Potter, Alastair W. Robertson, 2007, A review of the ecology and conservation of Placostylus (Mollusca: Gastropoda: Bulimulidae) in New Caledonia, Molluscan Research 28(2): 111–122

- Placostylus eddystonensis savesi Crosse, 1887
- Placostylus fibratus alexander (Crosse, 1855)
- Placostylus fibratus fibratus (Martyn, 1784)
- Placostylus fibratus goroensis (Souverbie in Souverbie & Montrouzier, 1870)
- Placostylus fibratus guestieri (Gassies, 1869)
- Placostylus fibratus ouveanus (Dotzauer in Mousson, 1869)
- Placostylus fibratus souvillei (Morelet, 1857)
- Placostylus porphyrostomus mariei (Crosse & Fischer in Crosse, 1867)
- Placostylus porphyrostomus monackensis (Crosse, 1887)
- Placostylus porphyrostomus porphyrostomus (L. Pfeiffer, 1851)
- Placostylus porphyrostomus smithii Kobelt, 1891
- Placostylus scarabus (Albers, 1854)

Other species of Gastropod molluscs internationally listed as CR/EN, potentially occurring in the region, but without any locational records for New Caledonia are listed in Table 3.

Table 3. CR/EN Gastropod molluscs not part of the observed species set used for the delineation

Species	RedList_Current	RedList_Proposed	RR
Draparnaudia anniae	CR		RR
Draparnaudia subnecata	CR		RR
Glyptophysa petiti	EN		RR
Heterocyclus perroquini	EN		RR
Heterocyclus petiti	EN		RR
Leuchocharis pancheri	CR		RR

Draparnaudia and *Leuchocharis* are air breathing land snails, *Heterocyclus* and *Glyptophysa* are freshwater snails (Neubert et al., 2009).
The non-threatened snails/bulimes identified to sub-species level (Placostylus porphyrostomus monackensis (Crosse, 1887), Placostylusporphyrostomus mariei (Crosse & Fischer in Crosse, 1867) and Placostylus porphyrostomus porphyrostomus (L. Pfeiffer, 1851)) were identified as being captured within larger sets of confirmed KBAs, and therefore single widely isolated observation points removed as triggers for KBA areas (Placostylus porphyrostomus monackensis: 1 out of 4 points discarded; Placostylusporphyrostomus mariei: 3 out of 10 points discarded; Placostylus porphyrostomus porphyrostomus: 5 out of 20 points discarded).

Reptiles

Reptile target species comprise 84, which are all considered as Restricted Range species. Endemism is very high in New Caledonia, and 15 of the reptile species are proposed to be classed as CR, another 22 are suggested to be ranked as EN, and 14 as VU. Out of 2638 point observations, 1758 locations were used in the analysis matching identifiable species descriptions in IUCN and local species lists, other observations were indicating so far not commonly known sub-species descriptions, were still open or are still not properly defined. Observations could confirm 14 species as CR, 14 as EN, and 10 as VU, based on a total of 372 observation points, all triggering confirmed KBA locations (VU was combined with Restricted Range). The comprehensive analysis observing and describing reptiles in New Caledonia was conducted by T. Whitaker and R.A. Sadlier (Australian Museum) over the past years and a main analysis was conducted during a Global Reptile Assessment Workshop[10] in Noumea held in February 2010. The reptile species observation data was presented and discussed in collaboration with CI, endangered status of each species discussed and a proposed status developed. Also range polygons of the reptiles had been mapped on the base of relief and land cover. Later in March 2011 a final assessment of reptile species status was distributed to CI (Table 4) and further circulated.

Table 4. Final assessment of local/proposed Reptile Status

Species	RedList_Current	RedList_Proposed	RR
Bavayia exsuccida		EN	RR
Bavayia goroensis		EN	RR
Bavayia ornata		EN	RR
Caledoniscincus auratus		EN	RR
Caledoniscincus chazeaui		EN	RR
Caledoniscincus orestes		EN	RR
Celatiscincus similis		EN	RR
Dierogekko inexpectatus		CR	RR
Dierogekko kaalaensis		CR	RR
Dierogekko koniambo		CR	RR
Dierogekko nehoueensis		CR	RR
Dierogekko poumensis		CR	RR
Dierogekko thomaswhitei		CR	RR
Dierogekko validiclavis		EN	RR
Eurydactylodes occidentalis		CR	RR
Eurydactylodes symmetricus		EN	RR
Graciliscincus shonae		VU	RR
Kanakysaurus viviparus		EN	RR

[10] CI/IUCN Workshop, February 2010, Global Reptile Assessment Workshop for New Caledonia, held from 1st to 5th February 2010 in Noumea, NC

Species	RedList_Current	RedList_Proposed	RR
Kanakysaurus zebratus		EN	RR
Lacertoides pardalis		VU	RR
Lioscincus maruia		EN	RR
Lioscincus steindachneri		EN	RR
Lioscincus vivae		CR	RR
Marmorosphax boulinda		VU	RR
Marmorosphax kaala		CR	RR
Marmorosphax taom		CR	RR
Nannoscincus exos		CR	RR
Nannoscincus gracilis		VU	RR
Nannoscincus hanchisteus		CR	RR
Nannoscincus humectus		EN	RR
Nannoscincus manautei		CR	RR
Nannoscincus mariei		VU	RR
Nannoscincus rankini		VU	RR
Oedodera marmorata		CR	RR
Rhacodactylus chahoua		VU	RR
Rhacodactylus ciliatus		VU	RR
Rhacodactylus sarasinorum		VU	RR
Tropidoscincus aubrianus		VU	RR

Freshwater Fish and Crustaceans

A WWF/CI joint freshwater eco-regional biodiversity assessment was conducted in 2006. At various recording station across the country, the data was collected at rivers throughout Grand Terre. Additional information could be obtained from the New Caledonia Fish and Crustacean atlas(Atlas Poisson, Museum National d'Histoire Naturelle, 2003, Paris)[11].

Eleven *fish* and seven *crustacean* Species were considered in the analysis. The three species *Ophieleotris nov.sp, Sicyopterus sarasini, Stenogobius yateiensis* are endemic, and therefore regarded as restricted Range species. All the observed Crustacean species are restricted Range and are important indicators for fresh water environments Atlas Poisson, Museum National d'Histoire Naturelle, 2003, Paris, p.25). The species of the 2 genus included in the observation set are listed below (Table 5).

Table 5. Fresh water fish/Crustcaens part of the analysis

Group	*Species*	Status	RR
Crustaceans	*Caridina imitatrix*	endemique	RR
Crustaceans	*Caridina novaecaledoniae*	endemique	RR
Crustaceans	*Odiomaris pilosus*	endemique	RR
Crustaceans	*Paratya bouvieri*	endemique	RR
Crustaceans	*Paratya caledonica*	endemique	RR
Crustaceans	*Paratya intermedia*	endemique	RR
Crustaceans	*Paratya typa*	endemique	RR
Fish	*Cestraeus oxyrhynchus*		
Fish	*Cestraeus plicatilis*		
Fish	*Eleotris melanosoma*		
Fish	*Kuhlia marginata*		
Fish	*Ophieleotris sp*		RR
Fish	*Redigobius bikolanus*		
Fish	*Sicyopterus lagocephalus*	Espèce protégée en Province Nord	
Fish	*Sicyopterus sarasini*	Espèce protégée en Province Nord	RR
Fish	*Stenogobius yateiensis*	Espèce protégée en Province Nord	RR
Fish	*Stiphodon atratus*	Espèce protégée en Province Nord	
Fish	*Stiphodon rutilaureus*	Espèce protégée en Province Nord	

Species data was based on point locations at river stations. The point data was attributed with fish/ crustacean scientific name description and often included river names. Significant fish species distribution and classification information for the fresh water environment in New Caledonia was obtained from Christine Pöllabauer (Bureau d'Etudes et de Recherches biologiques Noumea, C.

[11] Marquet, G., Keith, P., Vignieux, E., 2003. Atlas des poissons et des crustacés d'eau douce de Nouvelle Calédonie, Patrimoines Naturels, 58.

Poellabauer, 2010)[12]. The spatial river network data (line features) employed were the DTSI primary and secondary river datasets (Reseau hydrographique principal/secondaire). The delineation of the latter data is based on aerial photography, with supposedly high accuracy of delineation. River names were not always clear and throughout available, both in fish/crustacean point data and primary river datasets. River names were not available for the secondary river data. Therefore, in addition to name matching, closest river features (to point collection data) were identified using spatial proximity analysis methods. Once river lines were identified the intersecting sub-catchments could be extracted as areas for confirmed KBA selection (Figure 3).

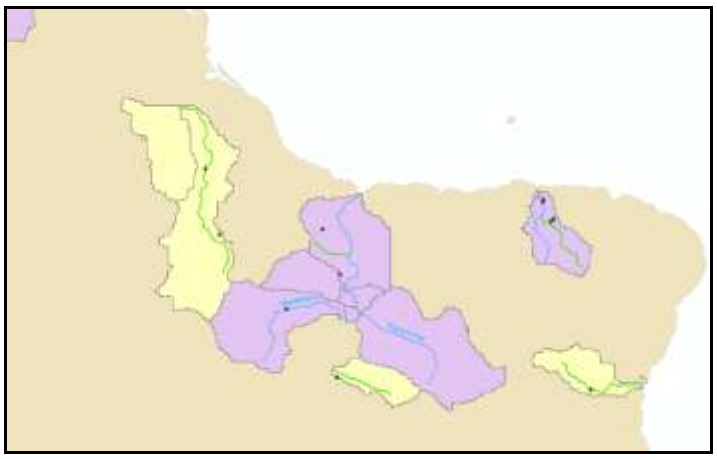

Fig. 3: Purple catchments correspond to Primary Rivers (blue) with names, yellow sub catchments are draining to only secondary rivers (green)

It was decided to select whole river sections in proximity to recorded fish at given point locations, and overlapping sub-catchments. Since ecological condition, water quality and flow are sensitive to environmental conditions, landuse activities and other influencing factors of corresponding drainage contributing areas, the selection of areas for protection of fish species focused on river related sub-catchments.

[12] Pöllabauer, Chrstine, 2010, Bureau d'Etudes et de Recherches biologiques, Information des espèce de poisson/qualité des rivières, Noumea

Plants

A comprehensive ecological information research of endangered plants in New Caledonia was conducted by Jerome Spaggiari end of 2009/beginning 2010, mainly focusing on mapping CR and EN and (locally) proposed endangered plant species (see Appendix XX). His results are based on the IUCN assessments (225 species: 3 EX, 27 CR, 66 EN, 125 VU and 4 LC) and referred to publications of Jaffré et al. (241 species: 1 EX, 26 CR, 68 EN, VU and 101 45 LC) and written recommendations of other authors. The data were presented in a working paper and as spatial data in form of point locations representing plant observations across New Caledonia.

Spaggiari performed a literature search on the name of the species from several search engines, mainly Google Scholar (http://scholar.google.ca/). The data retrieval from considered publications was concentrating on relevant information needed to define KBAs, such as location, habitats, population size, etc.). Information on 204 species had been obtained from this bibliography study. Also known and available locations of the species have been searched on the websites of various museums and the main site of Global Biodiversity Information Facility (GBIF). 101 kml files and 150 Excel files for species of known locations were downloaded. Finally, he analysed 23 book volumes of the Flora of New Caledonia and related information available, extracting the locations of known museum specimens. All geographic information available was analysed and those considered relevant were individually mapped (J. Spaggiari, 2010)[13]. He gathered 637 localities comprising 166 species from 42 families.

Further information on plant data was retrieved from the publication of Jaffré et al. (2010)[14]. conifer plants were highlighted and 41 species listed, being restricted to those environments on substrate environments of derived from ultramorphic soil, most of them below 900m altitude. Locational data for these plant species were retrieved from the Global Biodiversity Information Facility (GBIF), and used for the KBA analysis.

Target species and species observations

This analysis looked at 341 plant species, 319 are regarded as target species. 214 are being considered as threatened by the IUCN Red List (CR, EN, and VU), and 118 considered as threatened locally in New Caledonia ("Pink List": CR and EN, six species are VU). Thirteen species listed as threatened (CRENVU) on both lists.

Out of 214 plant species (IUCN - CR, EN, VU) 147 species were mapped, and included in the analysis. Observations of total of 100 threatened plants (locally or IUCN: CR, EN, VU) have not yet been available. Refined to CR or EN status both locally or IUCN, it revealed that 29 plant species were not mapped and included in this assessment. One of them is ICUN classed as CR (*Cleidion lemurum*).

[13] Jerome Spaggiari, 03/2010. Document de travail: "Informations écologiques recueillies sur les espèces de plantes néocalédoniennes considérées comme EN ou CR", in: Notes sur les espèces cartographiées - draft transmis.pdf

[14] Jaffré, T., Munzinger, J., Lowry, P.P., 02/2010. "Threats to the conifer species found on New Caledonia's ultramafic massifs and proposals for urgently needed measures to improve their protection", Biodiversity Conservation, Vol 19, No 5, p. 1485-1502, Springer Verlag

Another seven species are regarded as EN by IUCN Red List (*Cupaniopsis rotundifolia*, *Cupaniopsis glabra*, *Cryptocarya bitriplinerva*, *Eugenia daenikeri*, *Pittosporum gatopense*, *Niemeyera blanchonii*, *Cerberiopsis neriifolia*, *Podocarpus longifoliolatus* and *Psychotria deverdiana*).

Mapped Plant Species

Overall 3594 plant observations were recorded, with a total of 256 species. 1612 plant species observations account as endangered or are proposed endangered (CRENVU), comprising 219 individual species. 164 could be identified as either currently listed with IUCN as threatened (CR or EN) or are locally proposed as CR or EN (Table 6). 89 are currently classed as CR or EN (IUCN), and 91 species are locally proposed as CR or EN. Three plant species IUCN classed as EN are locally suggested as CR (*Libocedrus chevalieri*, *Phyllanthus unifoliatus* and *Retrophyllum minor*), and another four species status are assigned by IUCN as VU, and locally proposed as EN (*Jasminum noumeense*, *Libocedrus yateensis, Neocallitropsis pancheri* and *Podocarpus polyspermus*), one species (*Podocarpus decumbens*) is assigned by IUCN as VU, and locally proposed as CR.

Table 6. CR/EN Threatened Plant species (IUCN/local assessment)

Species	**RedList_Current**	**RedList_Proposed**
Acropogon bosseri		EN
Acropogon chalopiniae		CR
Acropogon jaffrei		EN
Acropogon margaretae		CR
Acropogon merytifolius		CR
Acropogon veillonii	EN	
Agathis ovata		EN
Alphandia resinosa		EN
Ancistrachne numaeensis	EN	EN
Araucaria humboldtensis		EN
Araucaria luxurians	EN	EN
Araucaria muelleri		EN
Araucaria nemorosa	CR	CR
Araucaria rulei	EN	EN
Araucaria scopulorum	EN	EN
Baloghia pininsularis	EN	
Beauprea congesta	EN	
Beauprea penariensis		EN
Bikkia kaalaensis	EN	
Bikkia lenormandii	EN	
Bocquillonia arborea	EN	
Bocquillonia castaneifolia	EN	
Bocquillonia longipes	EN	
Callitris sulcata	EN	EN

Species	RedList_Current	RedList_Proposed
Canacomyrica monticola	EN	
Canarium whitei	CR	
Canavalia favieri	CR	CR
Canavalia veillonii	CR	
Captaincookia margaretae	CR	
Casearia kaalaensis	EN	
Cassia artensis	EN	
Cassine brachycremastra		EN
Celtis hypoleuca	EN	
Cerberiopsis neriifolia	EN	
Cloezia aquarum		EN
Codiaeum oligogynum		EN
Croton cordatulus	EN	
Cupaniopsis mouana	EN	
Cupaniopsis rosea	EN	
Cupaniopsis squamosa	EN	
Cupaniopsis subfalcata	EN	
Cupaniopsis tontoutensis	EN	
Cyphophoenix nucele	CR	
Cyrtandra mareensis		EN
Dacrydium guillauminii	CR	CR
Deltaria brachyblastophora		CR
Dendrobium munificum		CR
Diospyros erudita		EN
Diospyros neglecta		EN
Diospyros veillonii	CR	
Dracophyllum alticola		EN
Dysoxylum pachypodum	CR	
Elaeocarpus kaalensis		EN
Gmelina lignum-vitreum	CR	
Hemigraphis neocaledonica		EN
Hibbertia favieri		CR
Hibbertia margaretae		CR
Hibbertia rubescens		CR
Homalium betulifolium	EN	
Homalium buxifolium	EN	
Homalium juxtapositum	EN	
Homalium mathieuanum	EN	
Homalium polystachyum	EN	
Homalium rubrocostatum	EN	
Hunga cordata	EN	

Species	RedList_Current	RedList_Proposed
Iteiluma pinifolium		EN
Jasminum noumeense	VU	EN
Justicia pinensis	EN	EN
Kentiopsis oliviformis	EN	
Kentiopsis pyriformis		CR
Lasiochlamys hurlimannii	EN	
Lavoixia macrocarpa	CR	
Leptostylis gatopensis	EN	
Leptostylis goroensis	CR	
Libocedrus chevalieri	EN	CR
Libocedrus yateensis	VU	EN
Litsea imbricata	EN	
Litsea stenophylla		EN
Logania imbricata		EN
Macadamia angustifolia		EN
Medicosma articulata		EN
Medicosma Congesta		EN
Medicosma exigua		EN
Medicosma gracilis		EN
Medicosma latifolia		EN
Medicosma leratii		EN
Medicosma petiolaris		EN
Medicosma suberosa		EN
Medicosma subsessilis		EN
Medicosma tahafeana		EN
Megastylis latissima		EN
Megastylis paradoxa		EN
Melodinus insulaepinorum		EN
Metrosideros tetrasticha		EN
Myricanthe discolor		EN
Neisosperma sevenetii	EN	
Neisosperma thiollierei	CR	
Neocallitropsis pancheri	VU	EN
Ochrosia inventorum	CR	CR
Oryza neocaledonica	EN	EN
Oxanthera fragrans	EN	
Oxanthera neocaledonica	EN	
Oxanthera undulata	CR	
Pandanus lacuum	EN	
Pandanus verecundus	CR	
Phyllanthus baraouaensis		EN

Species	RedList_Current	RedList_Proposed
Phyllanthus conjugatus	EN	
Phyllanthus fractiflexus		EN
Phyllanthus golonensis		EN
Phyllanthus jaubertii		CR
Phyllanthus mcphersonii		EN
Phyllanthus natoensis		EN
Phyllanthus paucitepalus		EN
Phyllanthus petchikaraensis		EN
Phyllanthus pindaiensis	CR	CR
Phyllanthus pinjenensis		EN
Phyllanthus rozennae		EN
Phyllanthus stenophyllus		EN
Phyllanthus unifoliatus	EN	CR
Phyllanthus veillonii		EN
Pittosporum aliferum	EN	
Pittosporum brevispinum	EN	
Pittosporum muricatum	EN	
Pittosporum ornatum	EN	
Pittosporum tanianum	CR	
Planchonella contermina		EN
Planchonella kaalaensis		EN
Planchonella koumaciensis		EN
Podocarpus beecherae		EN
Podocarpus decumbens	VU	CR
Podocarpus longefoliolatus		EN
Podocarpus polyspermus	VU	EN
Pouteria brevipedicellata	EN	
Pouteria danikeri	EN	
Pouteria pinifolia	EN	
Pritchardiopsis jeanneneyi	CR	
Rauvolfia sevenetii		CR
Retrophyllum minor	EN	CR
Sarcomelicope glauca	CR	
Scaevola macropyrena		EN
Schefflera veitchii	EN	
Semecarpus riparia	EN	
Serianthes germainii		EN
Solanum hugonis	EN	EN
Solanum pseuderanthemoides		CR
Stenocarpus heterophyllus	EN	
Stenocarpus villosus	CR	

Species	RedList_Current	RedList_Proposed
Styphelia violaceospicata		EN
Tephrosia leratiana		EN
Terminalia cherrieri	EN	
Trigonostemon cherrieri	CR	
Tristaniopsis polyandra	EN	
Tristaniopsis yateensis	EN	
Vitex evoluta	EN	
Xanthostemon francii		EN
Xanthostemon glaucus	CR	
Xanthostemon lateriflorus		EN
Xanthostemon longipes		EN
Xylosma capillipes	CR	
Xylosma grossecrenatum	EN	
Xylosma inaequinervium	EN	
Xylosma peltatum	CR	
Xylosma pininsulare	CR	
Zygogynum oligostigma	EN	

Landscapes

Dry Forest

Tropical dry forest is threatened in New Caledoina because it has been reduced to less than 2% of its original extent. This is mainly due to urbanisation, land clearance, overgrazing, road infrastructure development and bush fires (Bouchet et al. 1995)[15]. "Tropical dry forest in New Caledonia is one of the world's most endangered tropical dry forest based on the current extent of the forest, endemism, number of protected areas, and threatened species" (Gillespie & Jaffré 2003)[16]. Most of the dry forest distribution is along the west coast, in the low lands intermixed with agricultural land use (cattle grazing). The dry forest is situated in a dry climate with less than 1100 mm annual rainfall (Dry Forest Programme, 2010)[17]. The dry forests differ from the moist forests in their plant composition. The dry forest of New Caledonia contains 456 plant species belonging to 83 different botanical families. The specific rate of endemism is 57.5% (Dry Forest Programme, 2010).

Around twenty species are very rare, some do exist in a single location with sometimes less than ten individual plants. 49 species of dry forest are being proposed on the IUCN red list with a status of CR, EN or VU. The dry forest of New Caledonia contains the highly endangered species such as rare lianas (*Oxera pulchella* and *Turbina inopinata*), shrubs (*Diospyros veillonni*) or endemic grasses of the dry forest (*Oryza neocaledonica* and *Ancistrachne numaensis*). The dry forest also contains the endangered plant *Captaincookia margaretae* which is the only member of its genus (Rubiaceae) (Dry Forest Programme, 2010).

Mangroves

According to the Mangrove Atlas 2006[18], there are 35,100 ha are covered with Mangrove ecosystems in New Caledonia. This includes 25,900 ha of forest, shrub or tree (55% of *Rhizophora spp*. dominant formations and 14% of *Avicennia marina* dominant formations) and 9,200 ha of marsh land. 88% of mangroves were recorded on the West Coast, composed of 59% in Northern Province, 40% in Southern Province and 1% in the Island Provinces[8].

[15] Bouchet P.H., Jaffré T. and Veillon, J. M. 1995. Plant extinction in New Caledonia: protection of sclerophyll forests urgently needed. Biodiversity and Conservation 4: 415-428.

[16] Gillespie, T.W. and Jaffré, T. 2003. Tropical dry forests of New Caledonia. Biodiversity and Conservation 12: 1687-1697.

[17] Foret Seche Programme, (2010), http://www.foretseche.nc, accessed on 22nd April 2010.

[18] ZoNéCo, Mangrove Atlas, 2006, New Caledonia

Mangrove areas are protected areas in Province Sud. A study on mangroves in New Caledonia identified four regional distributional groupings such as generalists, north restricted, moisture preferring, and an arid specialist[19].

Foret Humide

The humid forest layer was extracted from the Occupation du sol data (DTSI). The primary data was obtained from the 2008 layer, and clouded areas were substituted with 1996 land cover information. Most of the IBAs in New Caledonia follow the distribution of the humid forest area. Areas of less than 50 ha were masked out, when employing this data in the selection process of added areas for confirmed KBAs.

Protection des Eaux

The information of protected water areas /captage has been obtained from DTSI. The latest delineation is based on February 2011, including large areas in Province Sud (overlapping Grand Sud, Rivière Bleue). The total area covered by the 280 protection sites is 226,381.45 ha. The installation of these water protection areas (Périmètres de protection des eaux, PPE) helps to protect the catchment activities that could affect the quality or quantity of extracted water. These PPEs are only installed for the purpose of water consumption of the communities (Conseil économique et social de la Nouvelle Calédonie, 2008)[20].

Predicted Plant Habitat

The environmental layers such as rainfall, altitude classes (derived from digital elevation model), geology, and land Cover mappings (based on Satellite Imagery classifications 1996 and 2008, DTSI). The estimations were produced through GIS Python scripting and mapped out as a spatial layer showing predictions of endangered plant habitats based on their occurrence in the landscape. The four environmental parameters served as descriptors for modelled estimations of threatened plant habitat distributions, implemented through in a four criteria model. Only those model derived habitat classifications were chosen that showed at least 6 plant observations points, ensuring higher confidence for area selection. This spatial data of estimated habitats greater than 10 hectars was considered when selecting added on areas for confirmed KBAs.

[19] Duke, N.c., A Brief Account of the Mangroves of New Caledonia, Interim report, 2007, University of Queensland, Brisbane, QLD Australia

[20] Conseil économique et social de la Nouvelle Calédonie 2008, Synthèse des Assises de l'eau

Marine Component

The Marine environment is represented through various data that was received from the NC gourvenment and other research institutions. This includes UNSECO worl heritage sites and further protection sites suggested by ecoregional analysis work (ERA/AER), Mangrove and (remotely sensed) seagrass areas, as well as Dugong observation points with derived proposed protection areas.

World Heritage Sites

New Caledonia's tropical lagoons and coral reefs of have been inscribed as a World Heritage Site in July 2008 under three criterions (vii, ix, and x), meaning (vii) superlative natural phenomena or natural beauty; (ix) ongoing biological and ecological processes and; (x) biological diversity and threatened species (McKenna, 2011)[21]. The six marine clusters are Atolls d'Entrecasteaux, Atolls d'Ouvéa et Beautemps-Beaupré, Grand Lagon Nord, Grand Lagon Sud, Zone Côtière Nord et Est and Zone Côtière Ouest. Within the frame of the 2008 World Heritage inscription an overall management framework was developed by the national and provincial government considering customary rights with the involvement of all local stakeholders (IUCN, 2008)[22]. Further within each of the six clusters, management and conservation plans are being developed with full stakeholder involvement, including co-management arrangements with the Kanak (McKenna, 2011).

Marine data

Marine data from various sources was obtained describing the marine environment of New Caledonia and associated challenges. DTSI provided World Heritage information, in the form of suggested marine protected sites. DTSI also provided the suggested delineations of protected areas within the marine environment derived from the ecoregional analyses (ERA/ AER)[23]. Mangrove data was considered in the mapping output as well as seagrass (herbier) layers obtained from DTSI in March 2011. The marine IBA delineation (ZICO) was obtained from SCO. The association Opération Cétacés supplied survey data (2009) on Dugong around Grand Terre, together with suggested Dugong Protection zones along the coast. The survey shows points where groups of Dugongs were observed, including the number of individuals per group. Dugongs are regarded as seascape species and would not account for site scale assessment for KBAs.

After data preparation of the above mentioned data, a map showing all conservation relevant marine zones was produced (Fig. 4). This output represents a base for further discussion with experts and stakeholders. This discussion can include transitioning from terrestrial KBA scale to watersheds and ridge-to-reef priorities.

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[21] McKenna S.A., Draft paper for Rapid Marine Biodiversity Assessment No.62 (for eastern Lagoons, New Caledonia), Conservation International

[22] World Heritage Nomination – IUCN Technical Evaluation, 2008. The Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems (France) – ID No. 1115, IUCN Evaluation Report May 2008

[23] Gabrié, C., Bouvet, G. , Chevillon, C., Cros, A. (et al.), December 2008. Analyse écorégionale marine de la Nouvelle-Calédonie, 1A1 Stratégie de conservation de la biodiversité marine, CRISP

Figure 4: Conservation relevant information within the Marine environment

Prioritisation of confirmed KBAs

Prioritisation can be based on the prevailing threats and threat levels to threatened (candidate) species. The threats could be categorised into mining and related research activities, bush fire occurrence, and a third threat represented invasive speices. An additional threat potential is the land ownership information, implying risks of disturbance or degrees of human influences. The latter however was not considered in the analysis as Province Governments indicated of handling related tenure issues on an individual/case by case basis.

One major threat theme for New Caledonia is bush fires and its analysis was based on detecting fires remotely via satellite. This involved a comprehensive time series analysis over the years 2000 to 2010.

Time series analysis of fire occurrences in New Caledonia

The MODIS active fire data MOD14A2 and MYD14A2 are part of the thermal anomalies products and provide a weekly/8day composites of daily fire occurrence observations of at 1-km resolution, and spectral range of at 3.9 and 11 µm. The data is recorded up to four times daily, on the two MODIS platforms, so called Aqua and Terra, detecting the emissions of the mid-infrared radiation from fires[24]. The MODIS sensor usually detects both flaming and smouldering fires of 1000m^2, however is able under very good, clear or near-nadir positions to identify flaming fires of one tenth of this size. It is also stated that under perfect conditions fires of 50m2 can be detected[3]. No upper limits of fire extent or temperature levels are restricting remote detection[3]. The 8 day composite is a maximum value composite of fire confidence levels, and lowest to highest confidence (low-confidence, nominal-confidence, or high-confidence fire) was taken in account when compiling the data.

Over a period of 11 years 8 day imagery composites (containing daily image data) were obtained, over a period of February 2000 to May 2010. Image data was aggregated and summary raster layers produced. A total summary data set contained all layers and pixel values represented summed fire occurrences throughout New Caledonia.

Mining

Mining data was obtained from Province Nord government. The data used for identification of mining activities was the mining cadastre from January 2010 as well as an updated version form December 2010. The status of mines, with names and other indicators were attributed values. The status descriptions of mining activities included current activity and the four major mining types such as Exploitation, Travaux de recherche et exploitation, Travaux de recherche, Pas d'activité

[24] Giglio, L., MODIS Collection 5 Active Fire Product User's Guide Version 2., 2010, Science Systems and Applications, Inc. University of Maryland, Department of Geography

minière. Based on this information threats to biodiversity were highlighted for confirmed and candidate KBAs.

Fire and Mining

Overlaying the information derived from fire frequency mapping and active mining operations highlighted KBAs locations and suggests establishment of priority levels for conservation action. The Threat ranking needs to be applied defining priority levels for KBAs. Priority levels were proposed such as (I) active mining exploitation areas (*Exploitation, Travaux de recherche et exploitation*) and areas of at least one fire occurrence, and (II) active mining research/assessment work (*Travaux de recherche et exploitation*) and at least one fire occurrence.

Other outputs priority areas within confirmed KBAs were also based on the two threat criteria mining and fire occurrence, emphasising areas with (I) both active mining exploitation (*Exploitation, Travaux de recherche et exploitation*) and fire occurrences at least recorded twice of the 11 year observation span, and locations (II) where either these conditions were fulfilled.

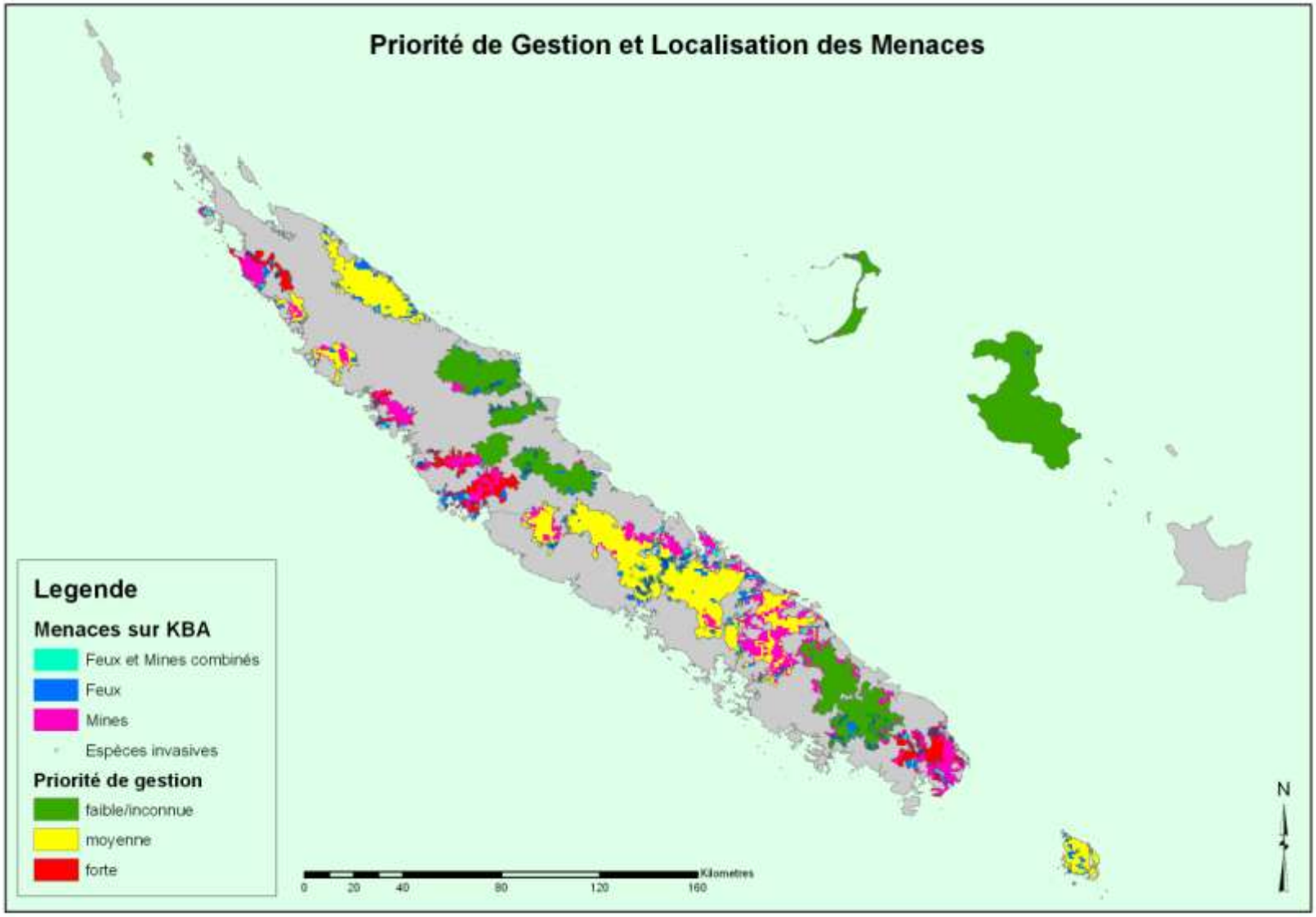
Invasive Species

Significant concerns represent invasive species in New Caledonia such as deer and wild pigs, insects (Wasmania ant) and plants. Corresponding data at this stage was available from IRD, in the form of plant invase species[25]. A spatial point dataset (with many points recordes on road sides) was obtained and projected and incorporated in a preliminary threat analysis. Based on this information the degree of investation of each confirmed KBA could then be assessed according to occurrence of observed invasive species locations. Other data on insects or wild pigs could not be retrieved. Province Nord has some point data on deer (cerf) observations. However, it is rather complex to map animal movements and identify preferred habitats or preferred feeding grounds as it requires more detailed data for monitoring observations and behaviour over time accurately.

Mapping the three threats themes

Using the threat layers fire, mines and invasive plant a map was generated where each threat within a confirmed KBA was counted and an index created through normalisation bythe corresponding KBA area. A threat layer was then produced as the weighted sum of all the three threat criteria.

[25] Les espèces exotiques envahissantes de Nouvelle-Calédonie. V. Hequet, M. Le Corre, F. Rigault, V. Blanfort. Septembre 2009, IRD, Noumea



Figure… Prioritisation for conservation action based on weighted sum of threats; Mining acitvities, fire and invasive plant species represent threats

Results

Threatened Species

The entire observation data covered 481 species that were mapped for analysis, this included 267 species with an status of CR, EN or VU according to IUCN or New Caledonian listings. The observed species are part of the 516 target species declared as threatened or restricted range by IUCN or proposed threatened by local New Caledonian lists.

Of these, 199 were known or proposed CR or EN status species, for which occurrence alone triggers KBA generation. Officially, proposed CR or EN status for a species means it can only trigger a "Candidate KBA", but the prevalence of endemic species and the restricted range nature of the proposed species certainly result in defining confirmed KBAs.

CR and EN species

- 83 CREN species covered by 28 (out of 30) IBAs
- Further 14 CREN species (all plants) covered by 12 Protected Areas (PAs) all in Province Sud: 8 Species Reserves (flora) including 6 (out of 7) of the Southern Botanical Reserves, one Provincial Park in Noumea, and two Special Reserves (fauna).
- A total of 101 out of 199 species are contained in both IBAs and PAs. 57 Species were observed only within IBAs, and 30 species only in PAs. 94 species were either in IBAs or in PAs. This left a remainder of 105 species, neither in IBAs nor in PAs, in areas outside existing IBAs and PAs.

VU, RR and species of national priority/ conservation significance

- 163 VURRNP species are covered by the analysis, 71 of these are VU (IUCN or locally proposed)
- 152 VU/RR/NP species are covered under the CR/EN triggered Planning units
- 11 VURRNP species are not covered within the first cut of the KBAs, and are 'outside' the set of CR/EN areas, represented by 31 locations.

CREN and VURRNP distribution within New Caledonia are illustrated in Figure 4 below.

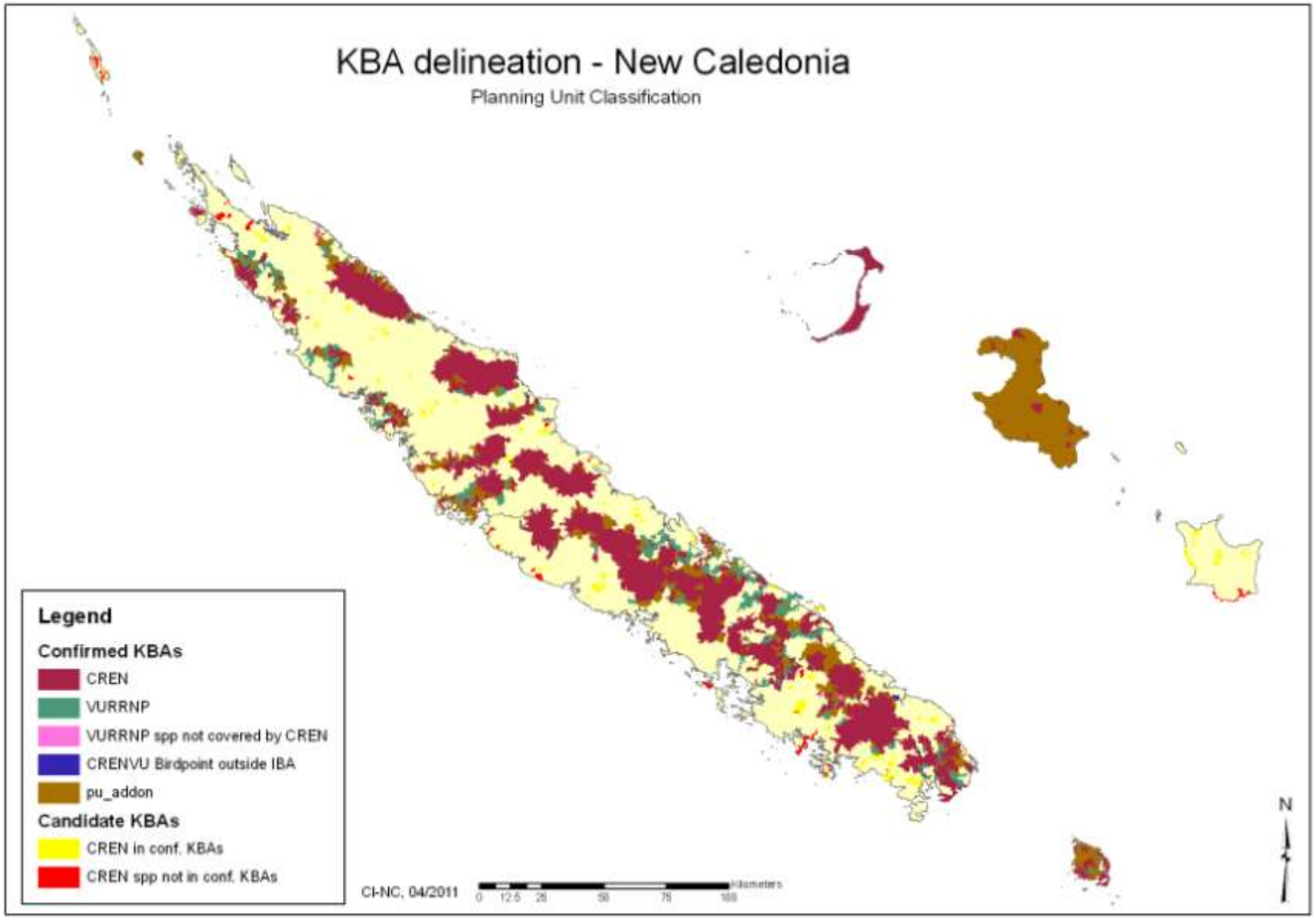


Fig. 4: Threatened species distribution and added areas for KBA delineation, April 2011

Following Figures 5 (a, b, c) are showing Province-wise details of the delineated KBAs and sites of observed threatened species that are not part of KBA species inventory.

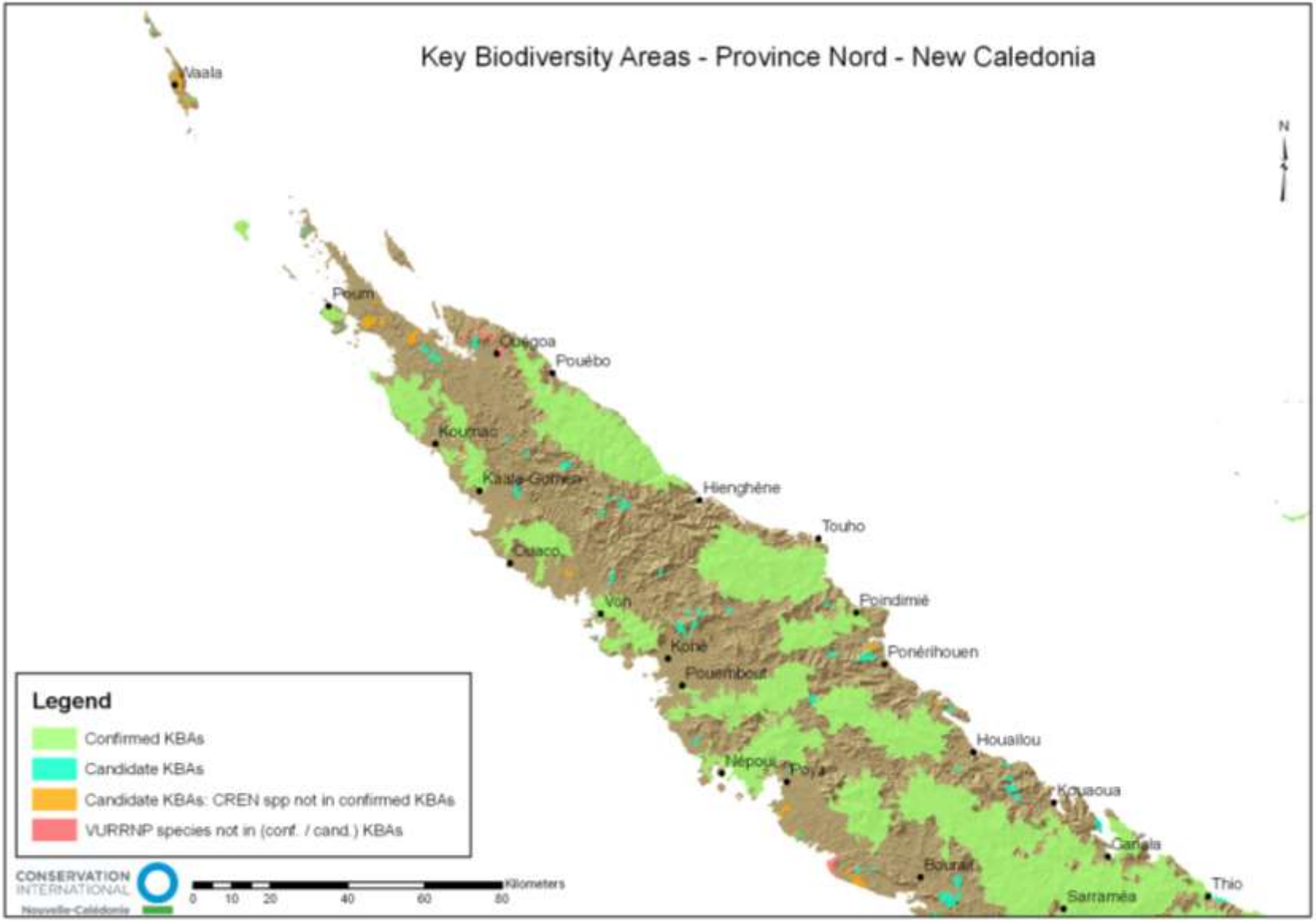


Fig. 5a: Province Nord – KBA delineation and threatened species

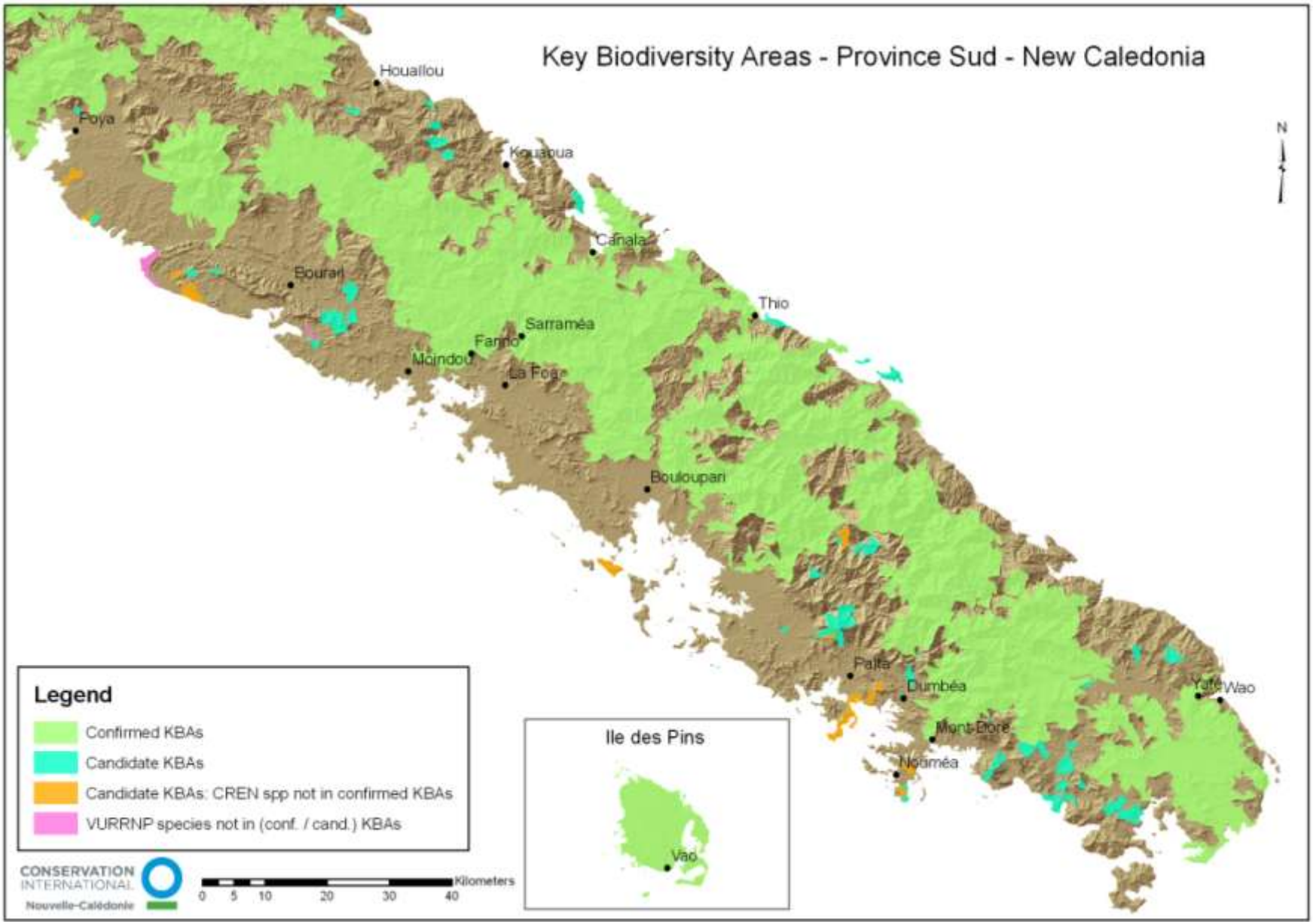


Fig. 5b: Province Sud – KBA delineation and threatened species

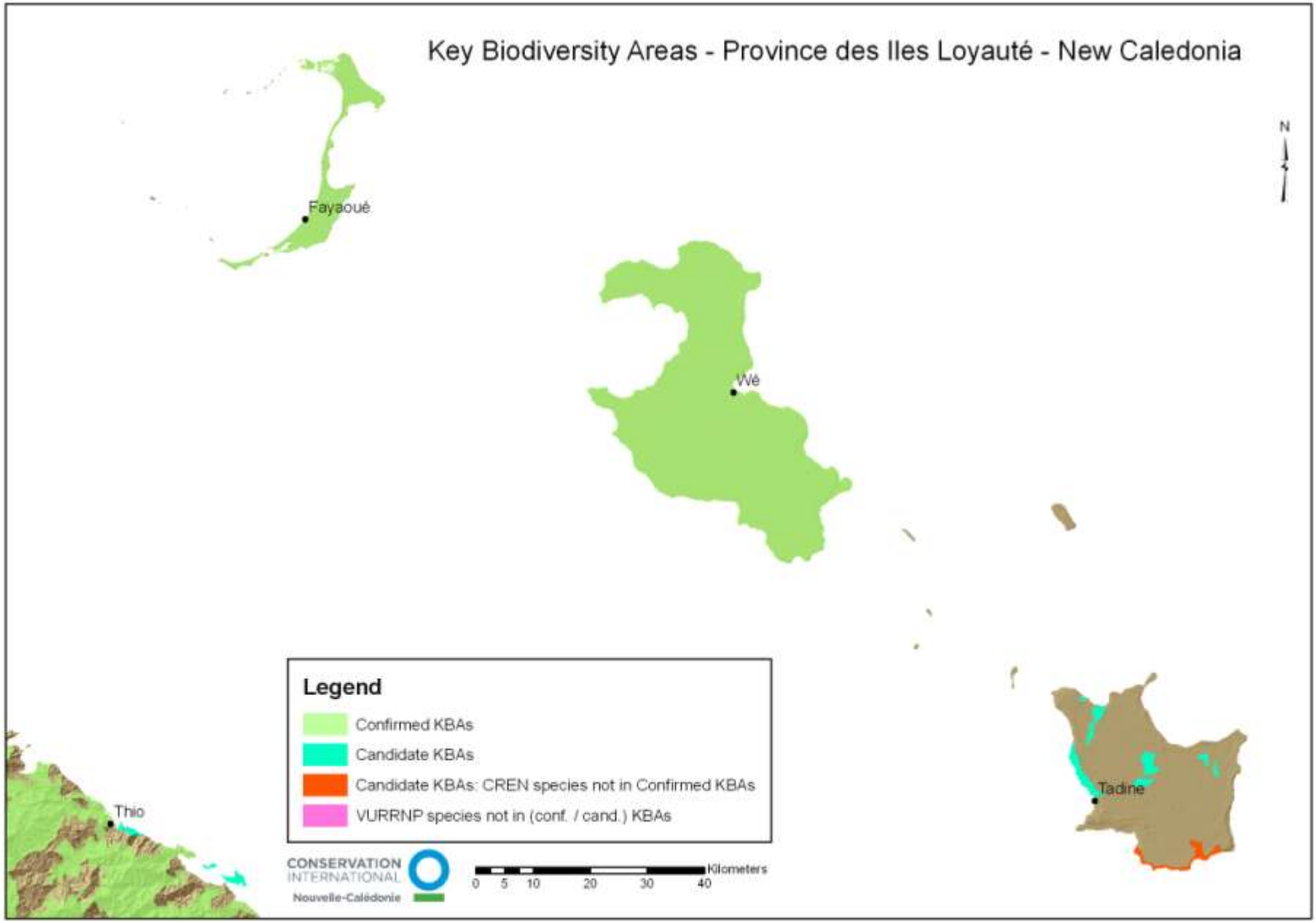


Fig. 5c: Province Iles Loyauté

Overall KBA Area statistics

The confirmed KBAs cover 41.8 % (769,225.47 ha) and candidate KBAs occupy 2.01% (37,048.37 ha) of the New Caledonian territory (1,838,615.11 ha). Both KBA sets therefore cover an area of 43.85% of New Caledonia (806,273.84 ha). Figure 6 below is illustrating this proportion.

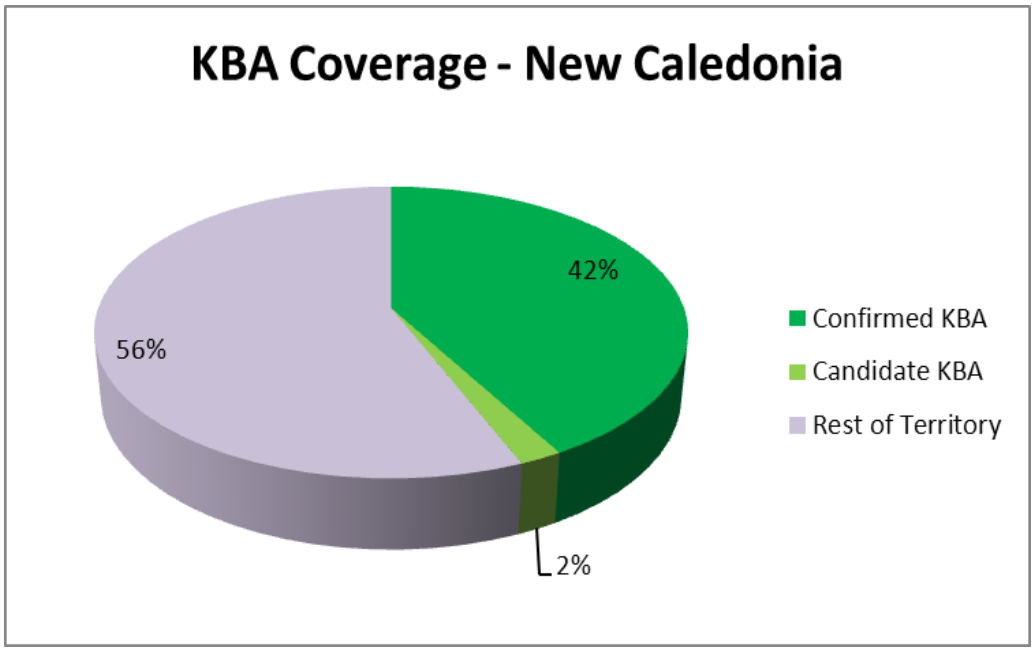


Figure 6: Proportion NC Territory area and KBA cover

Land cover within KBAs

The land cover information was derived from the 2008 “Occupation du Sol” data (DTSI). The cloud covered areas were substituted by the 1996 based land cover data characterised by a few classes being different from the 2008 land cover data. This should be considered as an estimate for the 2008 cloud cover patches enriching the overall information on ground features. Major overlapping land cover classes with delineated KBAs are listed in the Figure 7 and 8 below.

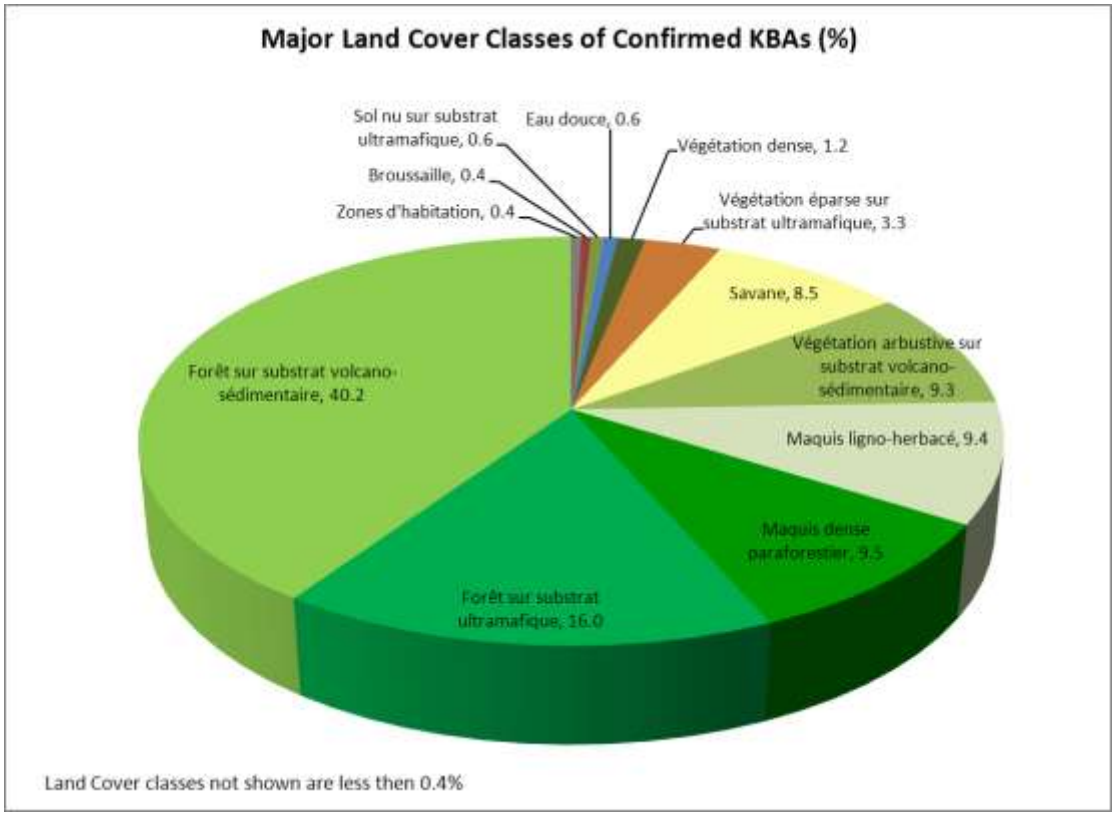


Fig. 7: Major Landcover classes in confirmed KBAs.

The land cover in candidate KBAs is shown in Figure 8.

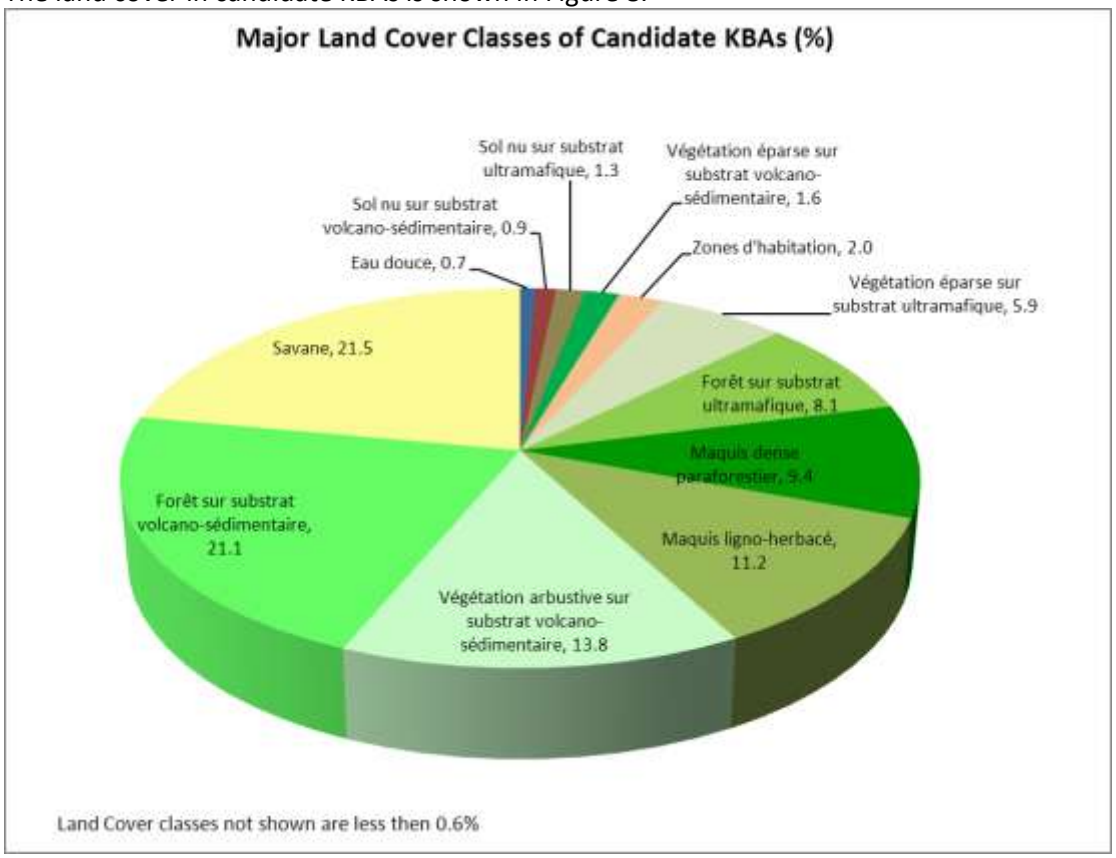


Fig. 8: Major Land cover classes in candidate KBAs.

Land tenure and KBAs

Land tenure/property distribution within KBAs was avaialable from DITTT (Noumea, 2010) as a spatial layer, and analysed overall for KBAs and each individual KBA. Figure 9 shows confirmed KBAs and their distribution across land tenureship.

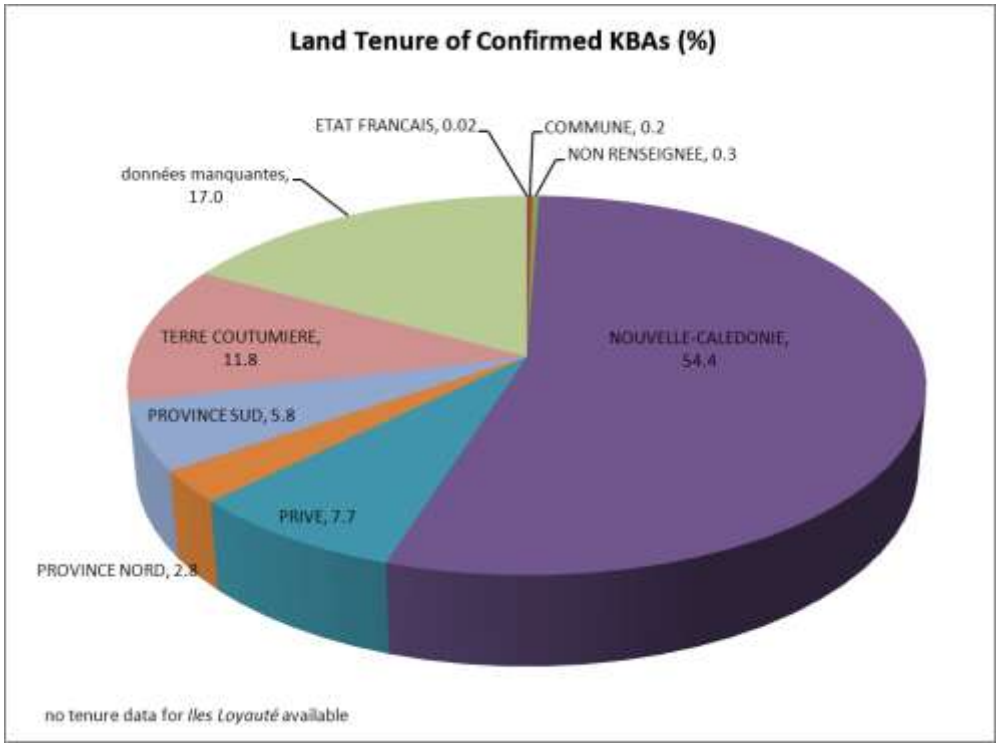


Fig. 9: Land Tenure intersection with confirmed KBAs, in percent

Figure 10 shows candidate KBAs and their respective land tenure proportions.

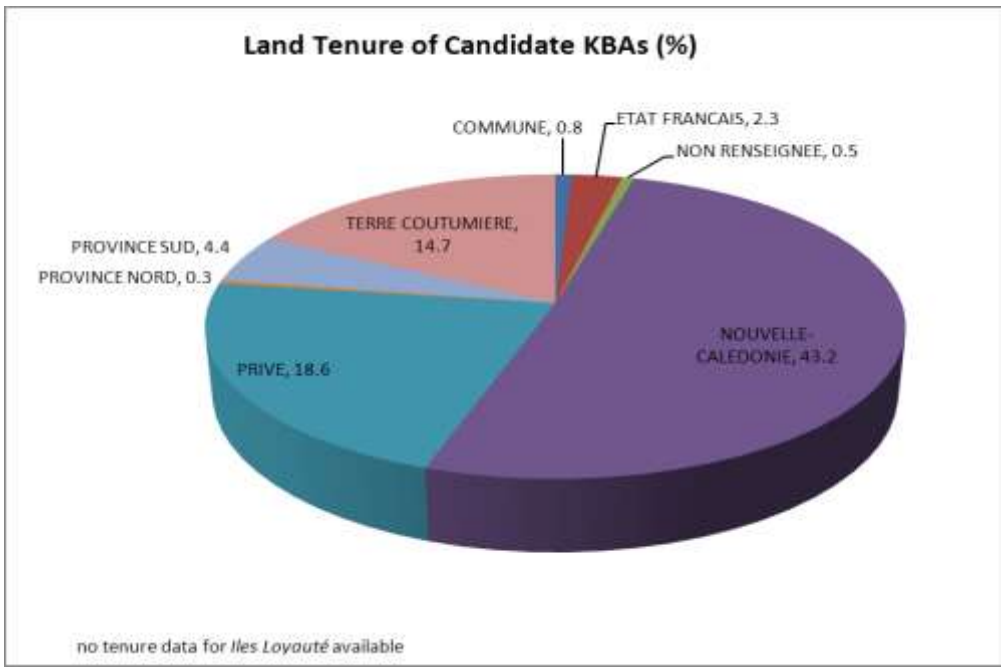


Fig. 10: Land Tenure intersection with candidate KBAs, in percent

Mining

17.0 % of the Mining Cadastre (release December 2010) cover the confirmed KBAs. Figure 11 shows the proportion of mining activities within these 17.0 % KBA cover.

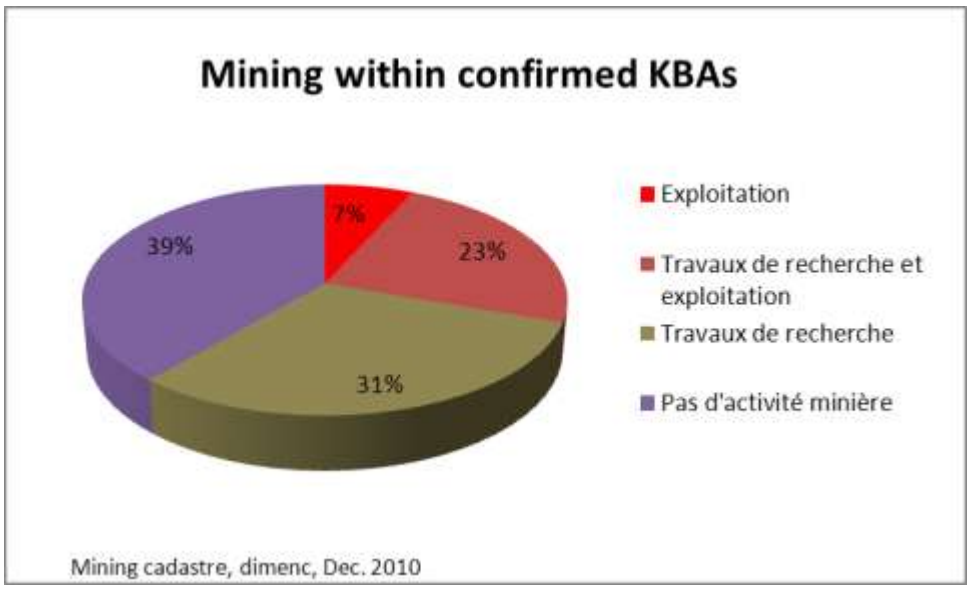


Figure 11. Percent of Mining activities within Confirmed KBAs; Mining cadastre covers a total of 17.0% (130,724.53 ha) of the confirmed KBAs.

The analysis with Mining activities within candidate KBAs reveals a similar intersection range with Mining areas. 15.70% of candidate KBAs are overlapped with areas of the Mining Cadastre (December 2010). Figure 12 gives a detailed overview how this intersection of Mining and Candidate KBAs is characterised.

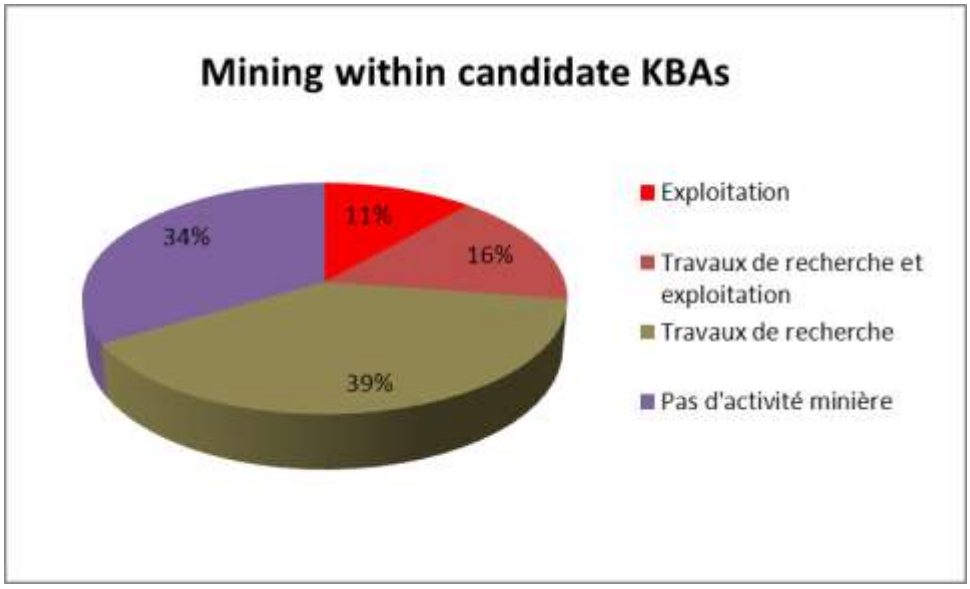


Figure 12. Percent of Mining activities within Candidate KBAs; Mining cadastre covers a total of 15.70% (5817.41 ha) of the candidate KBAs.

Overall statistics of KBAs regarding other landcover

Composition of confirmed and candidate KBAs

The following table (Table 7) shows the compostion of the entire area of confirmed and candidate KBAs regarding land cover types, geology and estimated habitat areas. It also reveals the number of fires detected in the KBA area delineation.

Table 7: Aera% of KBAs covered by landcover types

Type	*% confirmed KBA*	*% candidate KBA*
Captage d'eaux	17.40	11.11
Foret Humide	53.2	23.74
Predicted habitat*	1.04	2.48
Foret seche	0.30	2.05
Protected Areas	9.70	3.55
Ultramorphic geology	29.60	27.67
Fire Events/Occurence Year span 2000 – 2010 (remotely detected)	460	76

***Predicted habitat for endangered plants based on environmental criteria

Overall statistics of landcover regarding KBA cover

The proportion of Protected Areas, Water Protected Sites as well as humid and dry forest was calculated being covered by the KBA delineation (Table 8).

Table 8: Area % of landcover types covered by KBAs

Spatial data covered by ---	*Confirmed KBAs*	*Candidate KBAs*
% Foret seche	30.89	10.63
% Foret humide	67.76	1.46
% Protected Areas	97.21	1.71
% Captage d'Eaux	59.98	1.84

The 31% of dry forest cover is composed of the following confirmed KBA area coverages (Table 9):

Table 9: Area % of dry forest covered by individual confirmed KBAs

Confirmed KBA	*% of Foret seche*
KBA Boulinda	19.52
KBA Mt Kaala	0.94
KBA Kopeto	1.08

KBA Thiebaghi	9.35

68% of humid forest is covered by 21 (out of the 22) confirmed KBAs, the overlay percentage of each KBA is listed below (Table 10).

Table 10: Area % of humid forest covered by individual confirmed KBas

confirmed KBA	*% of Foret humide*
KBA Aoupinié Arago	3.99
KBA Boulinda	0.90
KBA Bwa Bwi	2.94
KBA Do Nyi	13.72
KBA Forêt Plate	1.40
KBA Goro Tane	1.91
KBA Grand Sud	1.36
KBA Ile des Pins	1.54
KBA Ile Yandé	0.02
KBA Koniambo	0.16
KBA Kopeto	0.17
KBA Kouakoué	4.96
KBA Lifou	17.29
KBA Massif des Lèvres	4.45
KBA Mt Kaala	0.03
KBA Mt Maoya	1.23
KBA Mt Panié	5.38
KBA Ouvéa	1.58
KBA Rivère Bleue	4.40
KBA Taom	0.29
KBA Thiebaghi	0.04

Description and Statistics of Confirmed KBAs in New Caledonia

22 confirmed Key Biodiversity Areas have been delineated within New Caledonia. The total area of the confirmed 22 KBAs equals to 769,225.47 ha representing 41.8 % of the total land area of New Caledonian territory (1,838,615.11 ha).

The confirmed KBA areas and area size are listed in Table 1 below.

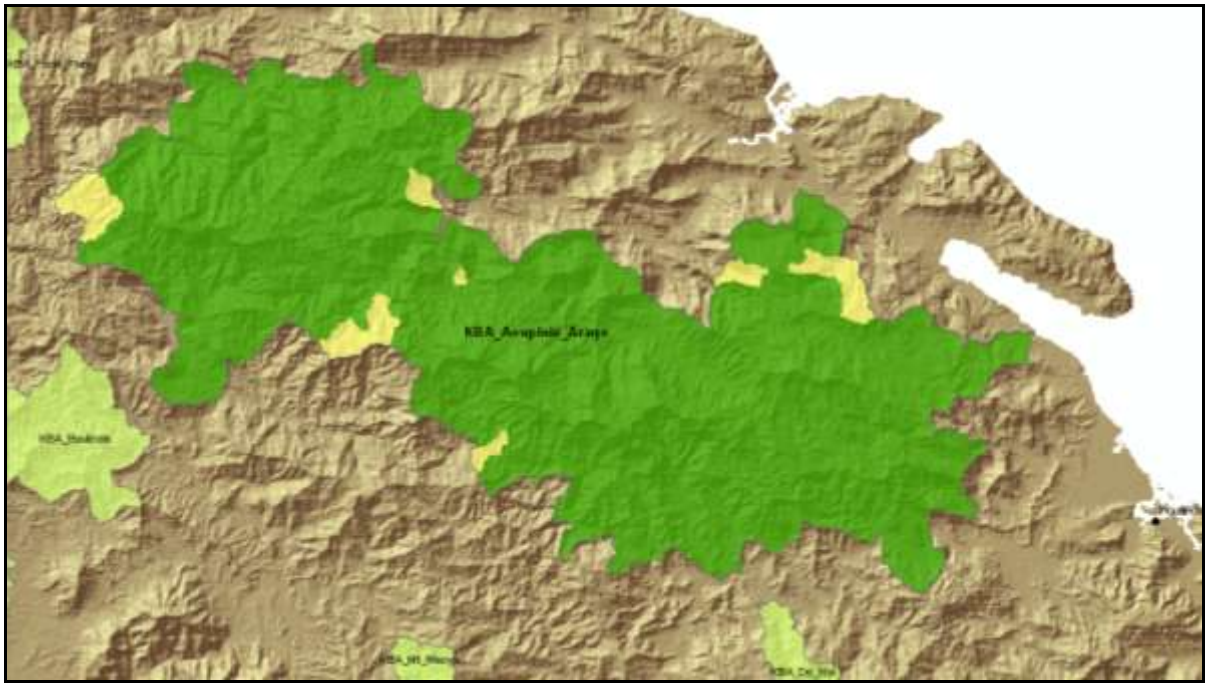
KBA	SUM area ha
Aoupinié Arago	34,123.03
Boulinda	26,508.19
Bwa Bwi	70,902.70
Do Nyi	152,591.05
Forêt Plate	13,530.95
Goro Tane	15,097.45
Grand Sud	38,643.46
Koniambo	13,307.16
Kopeto	13,201.99
Kouakoue	41,220.25
Massif des Lèvres	46,304.17
Mt Kaala	7,791.80
Mt Maoya	18,343.49
Mt Panie	51,367.94
Ouvea	13,417.33
Poum	1,502.01
Rivere Bleue	48,718.60
Taom	12,900.67
Thiebaghi	18,730.41
Lifou	113,754.90
Ile des Pins	15,945.37
Ile Yande	1,322.56

Table 1: Confirmed KBAs, and area size (ha)

Aoupinié Arago

Aoupinié Arago has an area of 34,123.03 ha, and is located at the southern part of Province Nord, and east of the town Houaïlou. It consists of CREN areas as well as manually selected “added areas” (that were not triggered through KBA criteria), but has not sites that are assigned as VURRNP only. The areal composition is

- CREN areas with 32,648.66 ha and
- added areas with 1,471.69 ha.



Documentation of Delineation:

The KBA Aoupinié Arago delineation is mainly based on CR/EN triggered sites, and comprises the two IBAs *Aoupinié* and *Arago* with *Rhynochetos jubatus* (EN). Further triggers are *Placostylus fibrates* (VU, proposed EN) and *Placostylus eddystonensis* (VU, proposed CR). The northern part of the KBA contains the Protected Area *Aoupinié* where the three species were sighted as well. Three water protection areas (perimetre d’eaux de captage) are within the KBA (*Tribu de Goapin*, *Tribus de Ba & Kaora et Meomo : Creek Mindai*, and *de Coula a Gonde : Creek Kouiou*).

Further areas were added to the KBA as they were covering humid forest and were filling small geographical gaps. In the mid-south they also complemented communal boundaries (Ponérihouen Commune), and had larger overlaps with ultramorphic soils. All southern additional areas also have smaller overlays with IBAs that and were left out by the automated processing (smaller than 5% were neglected). Added areas in the north-east contained further water protection areas (Tribu De Neavin : Creek Pouboui).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus eddystonensis*	VU	CR
Gastropods	*Placostylus fibratus*	VU	EN
Plantae	*Acropogon aoupiniensis*	VU	
Plantae	*Acropogon domatifer*	VU	
Plantae	*Agathis corbassonii*	VU	
Plantae	*Agathis moorei*	VU	VU
Plantae	*Cunonia aoupiniensis*	VU	
Plantae	*Diospyros fastidiosa*	VU	
Reptiles	*Nannoscincus rankini*		VU

Statistical Assessment:

Lithologie (1:1 Mio)	KBA Area % covered
Argilites, cherts, calcaires	0.57
Argilites, grès, charbons	0.01
Ensemble polymétamorphique indifférencié	15.49
Gabbros, dolérites, basaltes	5.52
Grès volcanoclastiques	72.99
Serpentinites	5.42

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	5.42
Foret Humide	70.62
Foret Seche	0
Protected Area "AOUPINIE"	15.71
Area Capatage d'eaux	9.20

Landuse - Occupation du Sol 2008/96	KBA Area % covered
Broussaille	1.55
Eau douce	0.22
Forêt sur substrat volcano-sédimentaire	70.77
Maquis minier clairsemé	0.001
Maquis minier dense	0.01
Nuages	0.32
Savane	4.38

Sol nu sur substrat volcano-sédimentaire	0.05
Végétation arbustive sur substrat volcano-sédimentaire	18.67
Végétation dense	3.31
Végétation éparse sur substrat volcano-sédimentaire	0.44
Zones d'habitation	0.27
Zones sombres (non interprétables)	0.02

Land Ownership	KBA Area % covered
ETAT FRANCAIS	0.0001
NOUVELLE-CALEDONIE	71.70
PROVINCE NORD	4.46
PRIVE	8.29
TERRE COUTUMIERE	15.06
NON RENSEIGNEE	0.07

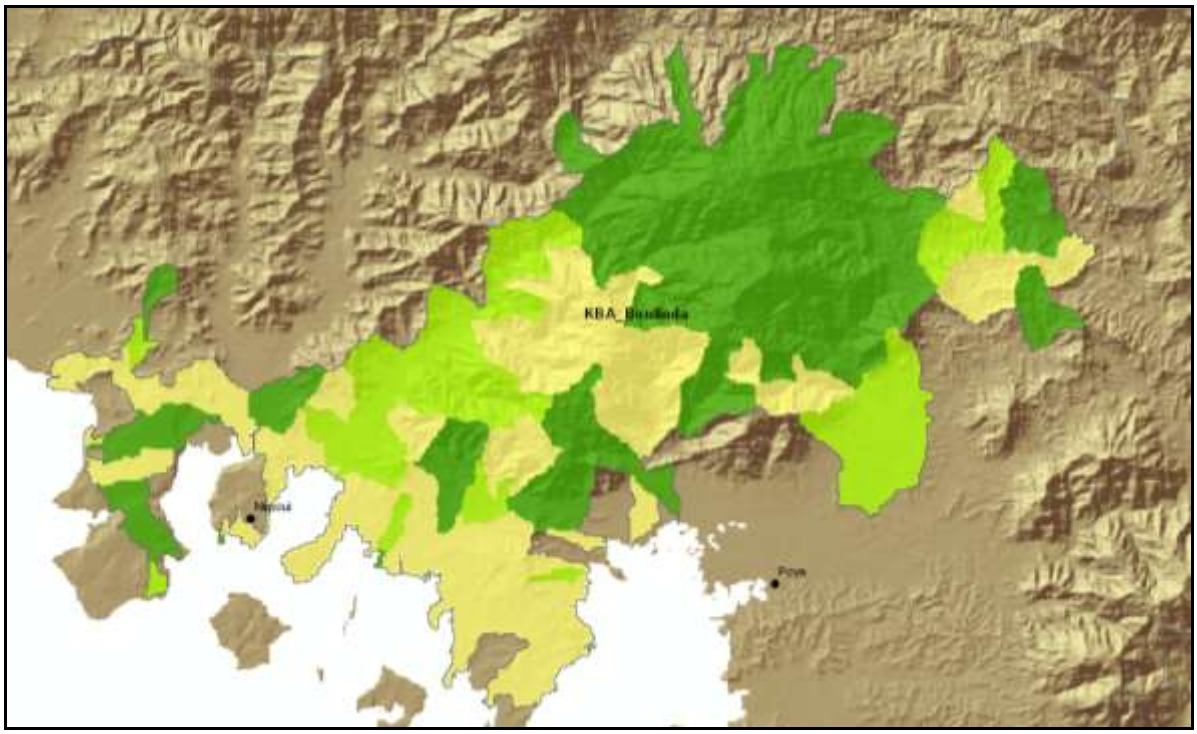
Threats	% of KBA
Mining (as of 2010/11)	
Travaux de recherche et exploitation	**0.6**
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	**20**

Boulinda

The KBA Boulinda covers an area of 26,508.19 ha, and is located at the southern part of Province Nord bordering the west coast between the towns Poya and Népoui.

The total area size for each main KBA cluster is

- CREN is 12,201.29 ha,
- VU/RR/NP is 5,251.09 ha, and
- addon areas 9,055.82 ha



KBA Boulinda with CREN (dark green), VU/RR/NP (light green), added areas (yellow).

Delineation:

The Boulinda KBA in the west covers areas of the IBAs Pindaï and almost all of IBA Boulinda in the north east that is triggered through the Kagu (*Rhynochetos jubatus*). Other endangered species in this KBA include the snail *Placostylus fibrates* (VU, propsed EN), the reptiles *Nannoscincus hanchisteus* (proposed CR)*, Lioscincus maruia* (proposed EN) and the bat *Notopteris neoclaedonica* (VU), where nests were observed in the very east of the KBA.

The north-eastern most added areas of the KBA cover areas of Forest Humide. Main added areas in the centre overlap ultra-morphic soil, and south-western and coastal added areas cover mostly areas of dry forest. Moreover, central and northern areas also cover reptile ranges of *Marmorosphax boulinda* and western areas overlap with reptile ranges of *Nannoscincus hanchisteus* (CR, but not triggered CREN as reptile ranges only served as indication). Also, predicted plant habitats for endangered species occur in small portions in the centre of add-on areas.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus fibratus*	VU	EN
Gastropods	*Placostylus porphyrostomus*	VU	
Mammals	*Notopteris neocaledonica*	VU	
Plantae	*Acropogon jaffrei*		EN
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis moorei*	VU	VU
Plantae	*Ancistrachne numaeensis*	EN	EN
Plantae	*Araucaria luxurians*	EN	EN
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Bocquillonia longipes*	EN	
Plantae	*Captaincookia margaretae*	CR	
Plantae	*Croton cordatulus*	EN	
Plantae	*Homalium rubrocostatum*	EN	
Plantae	*Kermadecia pronyensis*	VU	
Plantae	*Medicosma subsessilis*		EN
Plantae	*Parasitaxus usta*		VU
Plantae	*Phyllanthus pindaiensis*	CR	CR
Plantae	*Phyllanthus unifoliatus*	EN	CR
Plantae	*Pittosporum aliferum*	EN	
Plantae	*Pittosporum collinum*	VU	
Plantae	*Pittosporum gatopense*	VU	
Plantae	*Schefflera veitchii*	EN	
Plantae	*Semecarpus riparia*	EN	
Reptiles	*Bavayia exsuccida*		EN
Reptiles	*Lioscincus maruia*		EN
Reptiles	*Marmorosphax boulinda*		VU
Reptiles	*Nannoscincus hanchisteus*		CR

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**1.66**
Argilites, cherts, calcaires	**2.12**
Basaltes, dolérites	**25.35**
Conglomérats, calcaires périrécifaux	**4.07**
Cuirasses	**6.11**

Ensemble polymétamorphique indifférencié	**1.24**
Flysch	**2.64**
Flysch monogénique basaltique	**2.99**
Grès volcanoclastiques	**0.29**
Péridotites	**43.15**
Serpentinites	**10.09**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**47.76**
Foret Humide	**20.47**
Foret Seche	**5.26**
Area Capatage d'eaux (NAPPE DE LARIVIERE MONIO)	**8.49**

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	**0.24**
Eau douce	**0.45**
Eau marine	**0.09**
Forêt sur substrat ultramafique	**14.23**
Forêt sur substrat volcano-sédimentaire	**14.47**
Mangrove clairsemée	**0.19**
Mangrove dense	**0.04**
Maquis dense paraforestier	**14.27**
Maquis ligno-herbacé	**17.63**
Maquis minier clairsemé	**0.04**
Maquis minier dense	**0.17**
Savane	**15.13**
Sol nu	**0.01**
Sol nu de mangrove	**0.0004**
Sol nu sur substrat ultramafique	**0.87**
Sol nu sur substrat volcano-sédimentaire	**0.24**
Tanne	**0.55**
Végétation arbustive sur substrat volcano-sédimentaire	**12.65**
Végétation dense	**0.38**
Végétation éparse sur substrat ultramafique	**7.70**
Végétation éparse sur substrat volcano-sédimentaire	**0.16**
Zones d'habitation	**0.16**

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	68.78
PROVINCE NORD	2.24
PRIVE	17.88
COMMUNE	0.47
TERRE COUTUMIERE	8.70
NON RENSEIGNEE	0.74

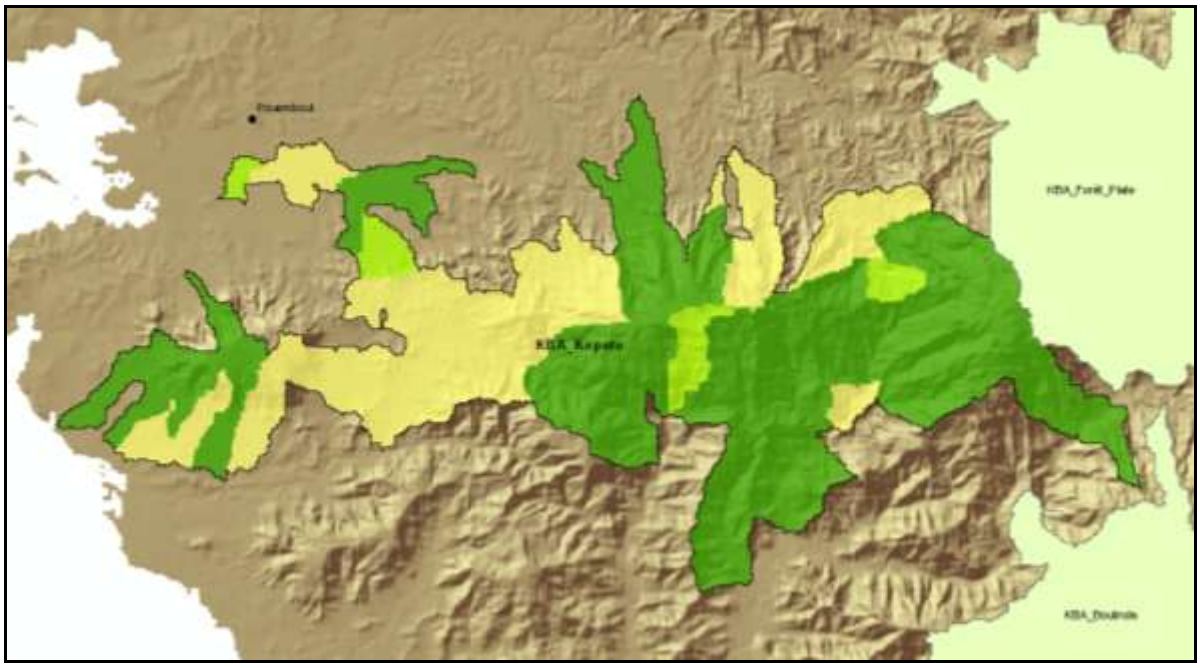
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	3.63	3.63
Travaux de recherche et exploitation	8.00	8.00
Travaux de recherche	0.91	10.88
Pas d'activité minière	8.57	8.57
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	54	

Kopeto

The KBA Kopeto has an area size of 13,202 ha, with

- CREN 8,194.46 ha,
- VURRNP 633.35 ha and
- add-on areas 4,374.18 ha.

It is located south of Pouembout, in Northern Province., and shares an eastern border with KBA Forest Plate.



Delineation:

Most of the central add-on patch and eastern as well as western-most added areas contain ultra-morphic geology, the latter overlapping with reptile ranges of *Kanakysaurus zebratus*, *Nannoscincus manautei*, and *Lioscincus vivae*. The central added areas are mostly on customary land. The small north western area contains humid forest ("Forêt sur substrat volcano-sédimentaire"), and connects to the observation site of *Placostylus porphyrostomus* (VU) further in the north-west. South-western parts of the KBA (CREN and add-on parts) overlap with a patch of endangered plant predicted habitats.

Species of KBA Kopeto:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus porphyrostomus*	VU	
Plantae	*Albizia guillainii*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Captaincookia margaretae*	CR	
Plantae	*Cleidion lochmios*	VU	
Plantae	*Diospyros erudita*		EN
Plantae	*Diospyros pustulata*	VU	
Plantae	*Elaeocarpus kaalensis*		EN
Plantae	*Homalium rubrocostatum*	EN	
Plantae	*Kermadecia pronyensis*	VU	
Plantae	*Medicosma congesta*		EN
Plantae	*Medicosma petiolaris*		EN
Plantae	*Neocallitropsis pancheri*	VU	EN
Plantae	*Oryza neocaledonica*	EN	EN
Plantae	*Pittosporum aliferum*	EN	
Plantae	*Pittosporum brevispinum*	EN	
Plantae	*Pittosporum collinum*	VU	
Plantae	*Pittosporum gatopense*	VU	
Plantae	*Planchonella contermina*		EN
Plantae	*Planchonella kaalaensis*		EN
Plantae	*Podocarpus polyspermus*	VU	EN
Plantae	*Solanum hugonis*	EN	EN
Plantae	*Xylosma grossecrenatum*	EN	
Plantae	*Xylosma inaequinervium*	EN	
Reptiles	*Kanakysaurus zebratus*		EN
Reptiles	*Lioscincus maruia*		EN
Reptiles	*Lioscincus vivae*		CR
Reptiles	*Nannoscincus manautei*		CR

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**7.21**
Basaltes, dolérites	**19.57**
Cuirasses	**4.49**
Grès volcanoclastiques	**2.58**
Péridotites	**58.09**
Serpentinites	**8.06**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**61.78**
Foret Humide	**7.83**
Foret Seche	**0.59**
Area Capatage d'eaux (Pouembout - Plateau Tiea)	**0.5**

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	**0.04**
Eau douce	**0.09**
Forêt sur substrat ultramafique	**4.24**
Forêt sur substrat volcano-sédimentaire	**9.48**
Maquis dense paraforestier	**16.28**
Maquis ligno-herbacé	**34.50**
Maquis minier clairsemé	**0.32**
Maquis minier dense	**1.37**
Savane	**12.84**
Sol nu	**0.02**
Sol nu sur substrat ultramafique	**2.76**
Sol nu sur substrat volcano-sédimentaire	**0.09**
Tanne	**0.001**
Végétation arbustive sur substrat volcano-sédimentaire	**6.69**
Végétation dense	**0.86**
Végétation éparse sur substrat ultramafique	**10.40**
Végétation éparse sur substrat volcano-sédimentaire	**0.02**
Zones sombres (non interprétables)	**0.001**

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	**62.12**
PROVINCE NORD	**0.04**
PRIVE	**18.09**
COMMUNE	**0.86**
TERRE COUTUMIERE	**18.62**
NON RENSEIGNEE	**0.28**

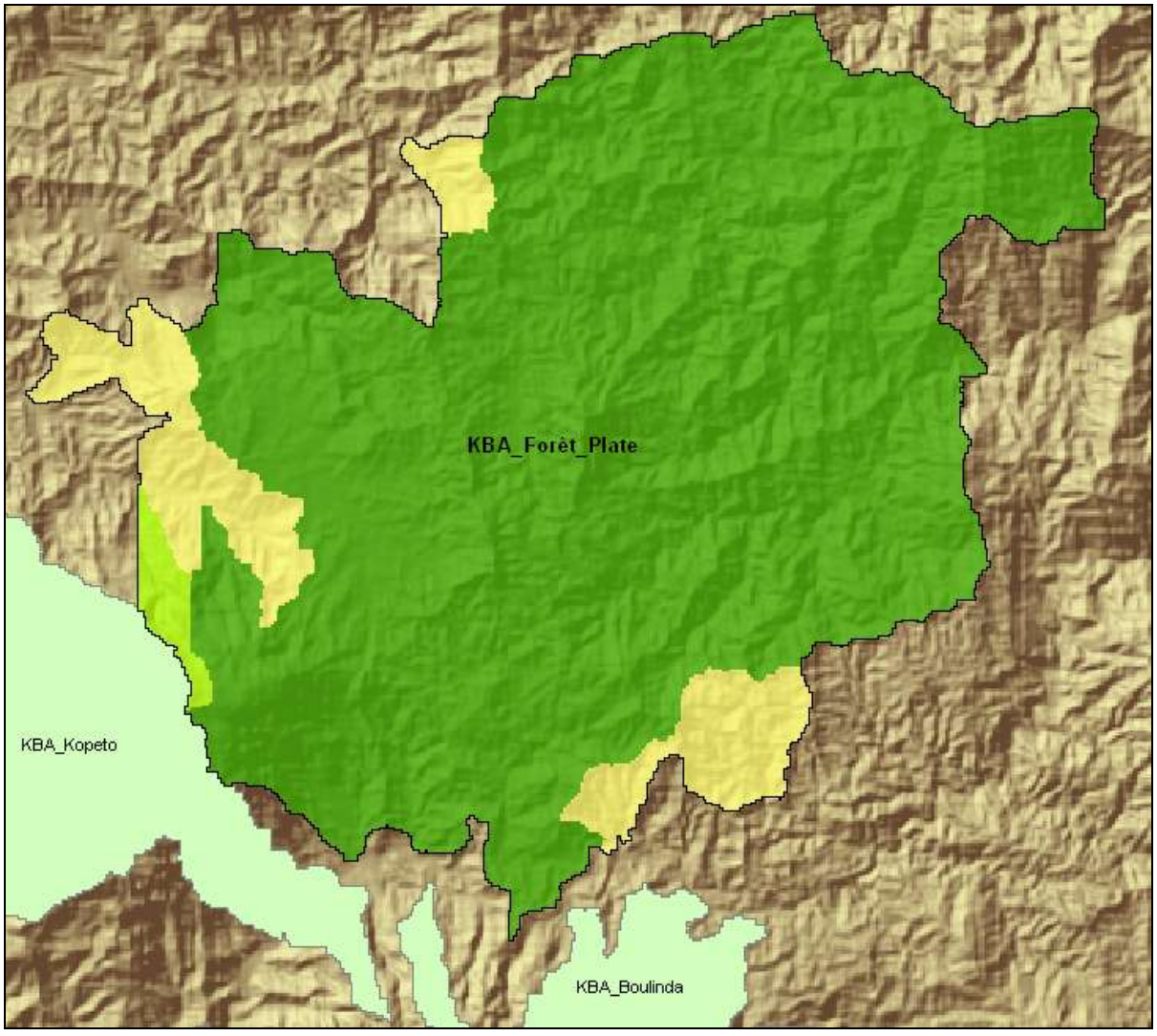
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	**1.91**	**1.91**
Travaux de recherche et exploitation	**26.63**	**26.63**
Travaux de recherche	**8.77**	**8.77**

Pas d'activité minière	**10.55**	**9.84**
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	**15**	

Forêt Plate

The KBA has a size of 13,530.95 ha, that comprises

- CREN with 11,961.00 ha,
- VURRNP with 173.50 ha and
- pu_addon with 1,396.45 ha.



Delineation:

The KBA Forêt Plate in Province Nord continues east from the Kopeto KBA. Most of the KBA Forêt Plate is covering the IBA Forêt Plate, and the souterhn half occupies the habitat range of the reptile *Nannoscincus humectus*. Added areas to this KBA include mostly humid forest. VuRNP areas are based on three reptile species.

Species:

Forêt Plate

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus eddystonensis*	VU	CR
Gastropods	*Placostylus fibratus*	VU	EN
Plantae	*Agathis moorei*	VU	VU
Plantae	*Araucaria montana*		VU
Plantae	*Dendrobium munificum*		CR
Plantae	*Oryza neocaledonica*		EN
Plantae	*Parasitaxus usta*		VU
Reptiles	*Lioscincus vivae*		CR
Reptiles	*Nannoscincus gracilis*		VU
Reptiles	*Nannoscincus humectus*		EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Argilites, cherts, calcaires	**11.82**
Argilites, grès, charbons	**23.11**
Cuirasses	**0.26**
Ensemble polymétamorphique indifférencié	**5.74**
Flysch	**0.67**
Grès volcanoclastiques	**51.19**
Péridotites	**3.41**
Serpentinites	**3.79**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**6.02**
Foret Humide	**62.58**

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	**1.41**
Eau douce	**0.22**
Forêt sur substrat ultramafique	**1.50**
Forêt sur substrat volcano-sédimentaire	**60.61**
Maquis dense paraforestier	**0.88**
Maquis ligno-herbacé	**1.80**
Maquis minier clairsemé	**0.25**

Forêt Plate

Maquis minier dense	0.38
Savane	8.78
Sol nu	0.001
Sol nu sur substrat ultramafique	0.31
Sol nu sur substrat volcano-sédimentaire	0.03
Végétation arbustive sur substrat volcano-sédimentaire	18.54
Végétation dense	3.96
Végétation éparse sur substrat ultramafique	1.29
Végétation éparse sur substrat volcano-sédimentaire	0.04
Zones d'habitation	0.01

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	24.86
PROVINCE NORD	61.61
PRIVE	2.6
COMMUNE	1.2
TERRE COUTUMIERE	9.53
NON RENSEIGNEE	0.09

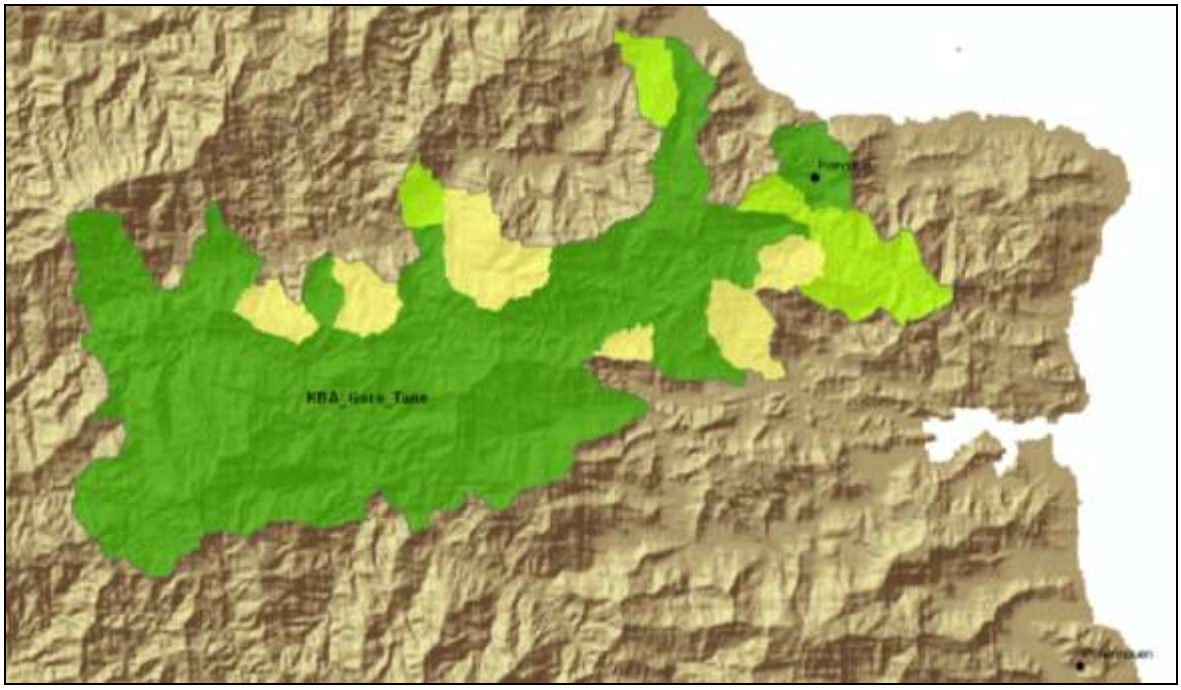
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Travaux de recherche et exploitation	2.81	2.81
Pas d'activité minière	1.43	1.43
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	2	

Forêt Plate

Goro Tane

Goro Tane KBA is located on the eastern side in Province Nord, and includes the town Poindimié. Its area size is 15,097.45 ha. This is the result of

- CREN size of 11,826.27 ha,
- VURRNP size of 1,431.96 ha and
- added areas of 1,837.11ha.



Most of the KBA is covered by the IBA “Goro Até et fonds de la Tchamba” with *Rhynochetos jubatus* (EN). North-western parts of the KBA overlap with IBA “Fonds vallée Amoa et Goro Je”. CREN triggers of Poindimié aera is *Medicosma articulate* (proposed EN). Add-on areas filling geographic gaps, were chosen based on high humid forest cover. The north eastern added patch is situated over a significant amount of ultra morphic geology. The eastern half of the KBA also represents a potential habitat for the reptile *Nannoscincus greeri* (proposed EN, but not considered as immediate trigger).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus fibratus*	VU	EN
Plantae	*Acropogon domatifer*	VU	
Plantae	*Acropogon margaretae*		CR
Plantae	*Acropogon merytifolius*		CR
Plantae	*Agathis corbassonii*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Archidendropsis paivana*	VU	
Plantae	*Libocedrus yateensis*	VU	EN
Plantae	*Medicosma articulata*		EN
Plantae	*Podocarpus polyspermus*	VU	EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Basaltes	**5.12**
Ensemble polymétamorphique indifférencié	**3.82**
Gabbros, dolérites, basaltes	**0.16**
Grès volcanoclastiques	**82.72**
Péridotites	**0.71**
Serpentinites	**7.47**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**8.17**
Foret Humide	**76.23**
Foret Seche	**0**
Area Capatage d'eaux (Creek Pombouli, Riviere Poihila, Riviere Ndiambi)	**6.81**

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	**4.39**
Eau douce	**0.28**
Forêt sur substrat ultramafique	**1.13**
Forêt sur substrat volcano-sédimentaire	**67.09**
Maquis dense paraforestier	**0.99**
Maquis ligno-herbacé	**1.26**
Maquis minier clairsemé	**0.15**
Maquis minier dense	**0.48**
Savane	**4.44**
Sol nu	**0.01**
Sol nu sur substrat ultramafique	**0.03**
Sol nu sur substrat volcano-sédimentaire	**0.02**
Végétation arbustive sur substrat volcano-sédimentaire	**9.29**
Végétation dense	**9.79**
Végétation éparse sur substrat ultramafique	**0.24**

Goro Tane

Végétation éparse sur substrat volcano-sédimentaire	0.08
Zones d'habitation	0.32

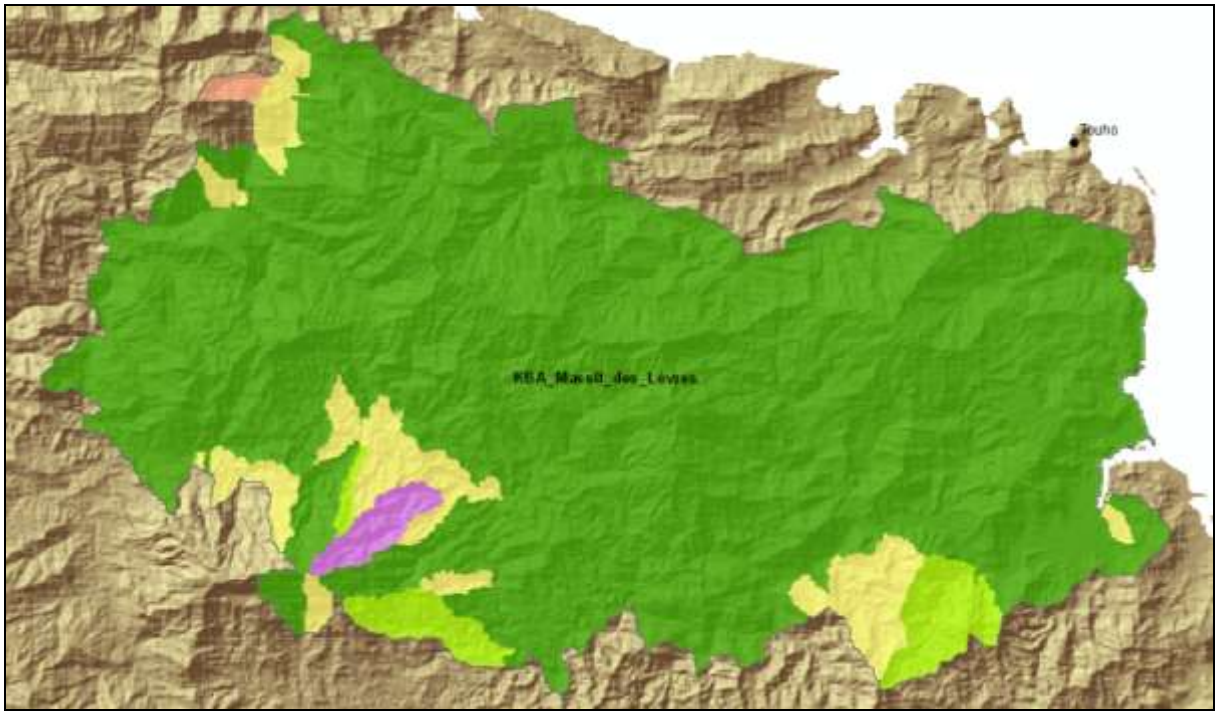
Land Ownership	% of KBA
NOUVELLE-CALEDONIE	69.41
PROVINCE NORD	3.81
PRIVE	11.56
COMMUNE	0.27
TERRE COUTUMIERE	13.91
NON RENSEIGNEE	0.41

Threats	% of KBA
No Mining records (2010)	
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	12

Massif des Lèvres

The KBA Massif des Lèvres has an area size of 46,304.17 ha, consisting of

- CREN with 40,710.69 ha,
- VURRNP with 1,820.22 ha (including area - VU Birdpoint outside IBA - with 169.28 ha),
- area with VURRNP species only occurrence with 503.04 ha and
- added areas of 3,253.14 ha.



KBA Massif des Lèvres: purple aeas in the south indicate VU species only occuring inside this KBA, northern pink area represents Bird observation (*Eunymphicus cornutus*, VU) outside the IBA 'Massif des Lèvres'.

The KBA is located south west of Touho. The majority of the KBA is covered by the IBA 'Massif des Lèvres'. Added areas include a bird point oservation outside the IBA in the north of *Eunymphicus cornutus* (VU), and all other areas with humid forest cover and ultra morphic geology. The latter areas were also chosen on the base of designing a compact KBA, also containing five protected water reservoirs (see below, list of environmental overlaps). The fragment observation area of the plant *Araucaria montana* (VU) that is not covered by any CREN locations throughout New Caledonia and it was decided to include it in this KBA.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Plantae	*Agathis moorei*	VU	VU
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Euroschinus jaffrei*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Homalium polystachyum*	EN	
Plantae	*Leptostylis petiolata*	VU	
Plantae	*Libocedrus yateensis*	VU	EN
Plantae	*Neisosperma sevenetii*	EN	
Plantae	*Phyllanthus stenophyllus*		EN
Plantae	*Podocarpus longifoliolatus*	EN	EN
Plantae	*Podocarpus polyspermus*	VU	EN
Plantae	*Sloanea suaveolens*	VU	

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**1.36**
Basaltes	**0.38**
Ensemble polymétamorphique indifférencié	**9.00**
Gabbros, dolérites, basaltes	**8.94**
Grès volcanoclastiques	**21.65**
Micaschiste, gneiss	**42.15**
Péridotites	**3.57**
Serpentinites	**12.88**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**15.22**
Foret Humide	**58.0**
Foret Seche	**0**
Area Capatage d'eaux (Creek Oue Hava, Congouma : Creek Taite, Touho Centre et Koe : Creek Ponandou, Pouiou et Kokingone, Tiwaka)	**6.7**

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	**1.58**
Eau douce	**0.93**
Eau marine	**0.002**
Forêt sur substrat ultramafique	**4.63**
Forêt sur substrat volcano-sédimentaire	**57.47**
Mangrove clairsemée	**0.003**
Mangrove dense	**0.01**
Maquis dense paraforestier	**2.29**
Maquis ligno-herbacé	**3.42**
Maquis minier clairsemé	**0.04**

Massif des Lèvres

Maquis minier dense	0.07
Savane	12.23
Sol nu	0.03
Sol nu sur substrat ultramafique	0.17
Sol nu sur substrat volcano-sédimentaire	0.08
Végétation arbustive sur substrat volcano-sédimentaire	13.99
Végétation dense	0.98
Végétation éparse sur substrat ultramafique	1.79
Végétation éparse sur substrat volcano-sédimentaire	0.11
Zones d'habitation	0.18
Zones sombres (non interprétables)	0.002

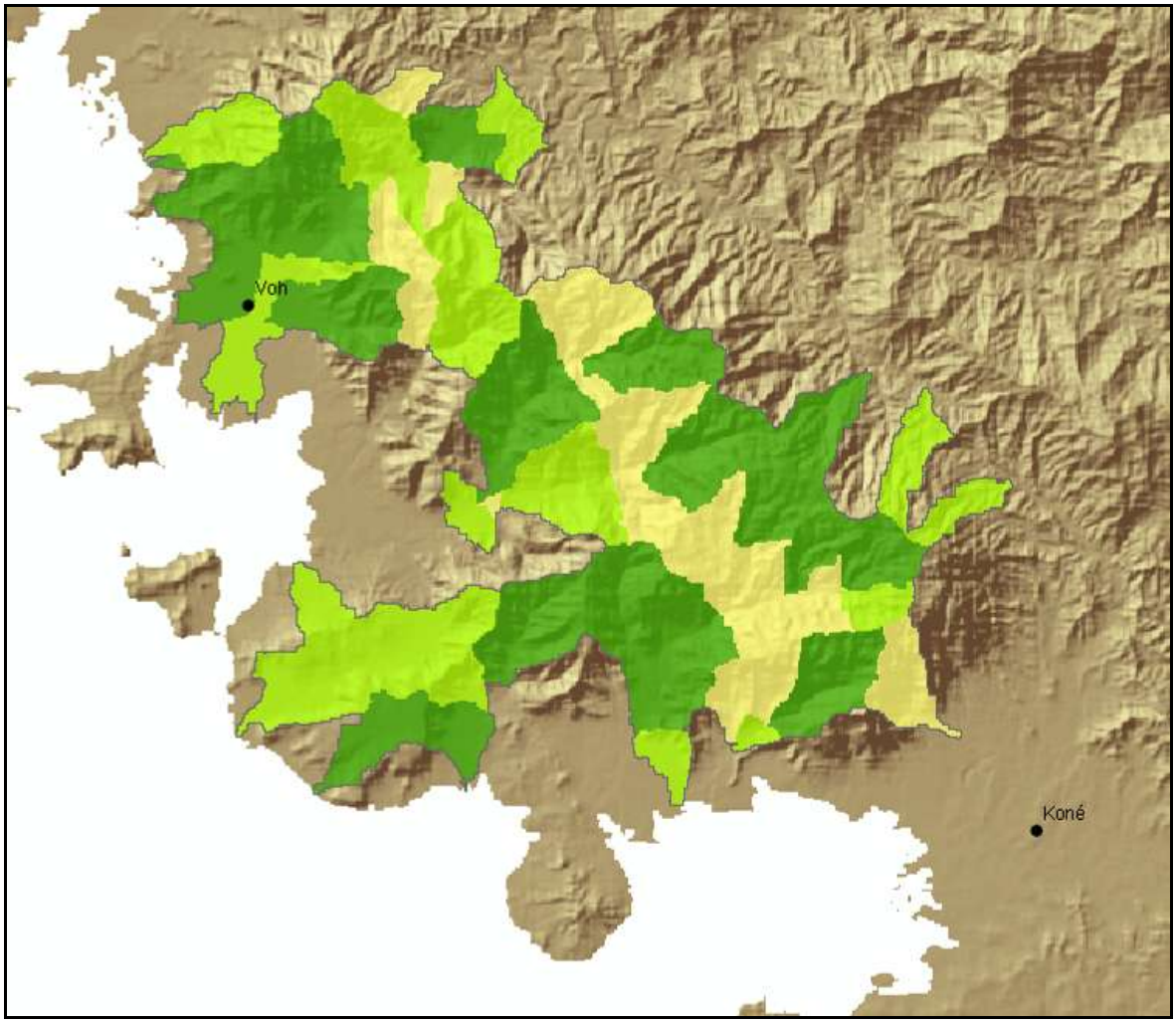
Land Ownership	% of KBA
NOUVELLE-CALEDONIE	66.92
PROVINCE NORD	5.40
PRIVE	5.29
TERRE COUTUMIERE	21.29
NON RENSEIGNEE	0.21

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Travaux de recherche	0.08	0.08
Pas d'activité minière	3.13	3.13
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	16	

Koniambo

The total area size of the KBA Koniambo is 13,307.16 ha.

- CREN areas cover 6,351.78 ha,
- VURRNP area size is 4,273.42 ha and
- added area size is 2,677.55 ha.



The KBA is north of Koné (PN), and stretches up to the town Voh which is part of the KBA. 80% of the KBA is situated on ultra morphic geology. All addon parts are on ultramorphic geology. Western and northern added patches link CREN and VURRNP areas ensuring compactness and connectivity of the KBA. The northern half of the large central addon area is selected based on covering high density of humid forest. Potential reptile habitat ranges of *Kanakysaurus zebratus* (proposed EN) and *Dierogekko koniambo* (proposed CR) are overlapping the entire KBA. Six protected water reservoirs are part of the KBA (see below). The south eastern added area fully captures the the protected water reservoir 'Tribus de Baco et Koniambo'. 0.3% of the KBA represents potential habitats for endangered plants, based on multi criteria model estimations. The estimated habitats may be suitable for *Neisosperma sevenetii* (EN) and *Schefflera veitchii* (EN).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Araucaria montana*		VU
Plantae	*Cassia artensis*	EN	
Plantae	*Cassine brachycremastra*		EN
Plantae	*Cleidion lochmios*	VU	
Plantae	*Codiaeum oligogynum*		EN
Plantae	*Croton cordatulus*	EN	
Plantae	*Cupaniopsis subfalcata*	EN	
Plantae	*Elaeocarpus kaalensis*		EN
Plantae	*Homalium juxtapositum*	EN	
Plantae	*Hunga cordata*	EN	
Plantae	*Leptostylis petiolata*	VU	
Plantae	*Medicosma tahafeana*		EN
Plantae	*Metrosideros punctata*	VU	
Plantae	*Phyllanthus fractiflexus*		EN
Plantae	*Pittosporum collinum*	VU	
Plantae	*Pittosporum gatopense*	EN	
Plantae	*Planchonella contermina*		EN
Plantae	*Planchonella kaalaensis*		EN
Plantae	*Planchonella koumaciensis*		EN
Plantae	*Pouteria danikeri*	EN	
Plantae	*Pycnandra kaalaensis*	VU	
Plantae	*Schefflera veitchii*	EN	
Plantae	*Styphelia violaceospicata*		EN
Plantae	*Tephrosia leratiana*		EN
Reptiles	*Dierogekko koniambo*		CR
Reptiles	*Kanakysaurus zebratus*		EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**7.30**
Argilites, cherts, calcaires	**2.66**
Argilites, grès, charbons	**0.19**
Basaltes, dolérites	**3.42**
Cuirasses	**6.25**
Péridotites	**52.01**
Serpentinites	**28.16**
Alluvions	**7.21**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**80.12**
Foret Humide	**7.36**
Foret Seche	**0**
Area Capatage d'eaux (Voh, Tieta, Tribu de Tieta, Tribus de Baco et Koniambo, Tribu d'Oundjo (2x))	**5.07**

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	**0.51**
Forêt sur substrat ultramafique	**10.76**
Forêt sur substrat volcano-sédimentaire	**5.80**
Mangrove clairsemée	**0.00**
Maquis dense paraforestier	**14.95**
Maquis ligno-herbacé	**37.13**
Maquis minier clairsemé	**0.05**
Maquis minier dense	**0.05**
Savane	**5.44**
Sol nu	**0.02**
Sol nu sur substrat ultramafique	**1.05**
Sol nu sur substrat volcano-sédimentaire	**0.05**
Tanne	**0.01**
Végétation arbustive sur substrat volcano-sédimentaire	**8.22**
Végétation dense	**0.00**
Végétation éparse sur substrat ultramafique	**15.00**
Végétation éparse sur substrat volcano-sédimentaire	**0.01**
Zones d'habitation	**0.95**

Land Ownership	% of KBA
ETAT FRANCAIS	**0.01**
NOUVELLE-CALEDONIE	**83.12**
PROVINCE NORD	**0.05**
COMMUNE	**0.80**
PRIVE	**8.83**
TERRE COUTUMIERE	**6.18**
NON RENSEIGNEE	**0.76**

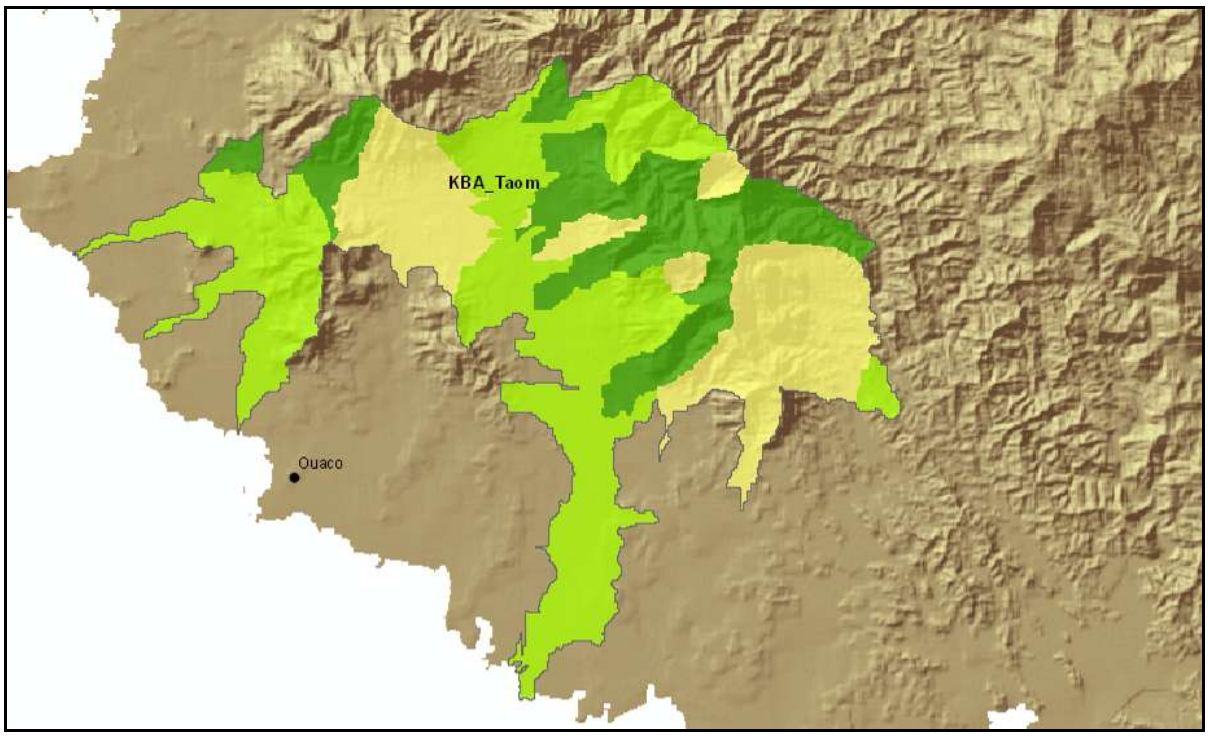
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	**2.72**	**2.72**
Travaux de recherche et exploitation	**41.17**	**41.17**
Travaux de recherche	**9.55**	**9.55**

Pas d'activité minière	**10.53**	**10.53**
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	**27**	

Taom

The KBA Taom is 12,900.67 ha large, with

- CREN of 3,147.77 ha,
- VURRNP of 6,081.93 ha and
- added areas of 3,665.97 ha.



Taom KBA is located near Ouaco town on the western coast of Province Nord. Eastern addon areas are over humid forest and ultra morphic substrate. The western patch also covers widely ultra morphic geology areas and is connecting the western sites of CREN and VURRNP. The KBA contains 3 water protection areas, and in the east potential habitat ranges of reptiles *Marmorosphax taom* (proposed CR) and *Dierogekko thomaswhitei* (proposed CR). 0.23% of the KBA are the potentially suitable as habitats for the endangered plant species *Schefflera veitchii* (EN), due to an environmental parameter model identifying three sites in this KBA.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus bondeensis*		CR
Plantae	*Araucaria montana*		VU
Plantae	*Cassine brachycremastra*		EN
Plantae	*Codiaeum oligogynum*		EN
Plantae	*Hibbertia rubescens*		CR
Plantae	*Myricanthe discolor*		EN

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Phyllanthus mcphersonii*		EN
Plantae	*Pittosporum collinum*	VU	
Plantae	*Planchonella kaalaensis*		EN
Reptiles	*Dierogekko thomaswhitei*		CR
Reptiles	*Marmorosphax taom*		CR

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**11.40**
Argilites, cherts, calcaires	**6.00**
Basaltes, dolérites	**36.86**
Cuirasses	**2.37**
Péridotites	**33.41**
Serpentinites	**9.95**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**42.13**
Foret Humide	**13.49**
Foret Seche	**0**
Area Capatage d'eaux (Tribu de Boyen : Creek Ouen Tigout, Pouanlotch, Ouaco)	**4.48**

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	**0.28**
Forêt sur substrat ultramafique	**14.93**
Forêt sur substrat volcano-sédimentaire	**2.13**
Mangrove clairsemée	**0.0003**
Maquis dense paraforestier	**6.62**
Maquis ligno-herbacé	**20.68**
Savane	**42.54**
Sol nu sur substrat ultramafique	**0.54**
Sol nu sur substrat volcano-sédimentaire	**0.23**
Tanne	**0.003**
Végétation arbustive sur substrat volcano-sédimentaire	**9.44**
Végétation éparse sur substrat ultramafique	**2.23**
Végétation éparse sur substrat volcano-sédimentaire	**0.22**
Zones cultivées, labours	**0.13**
Zones d'habitation	**0.02**

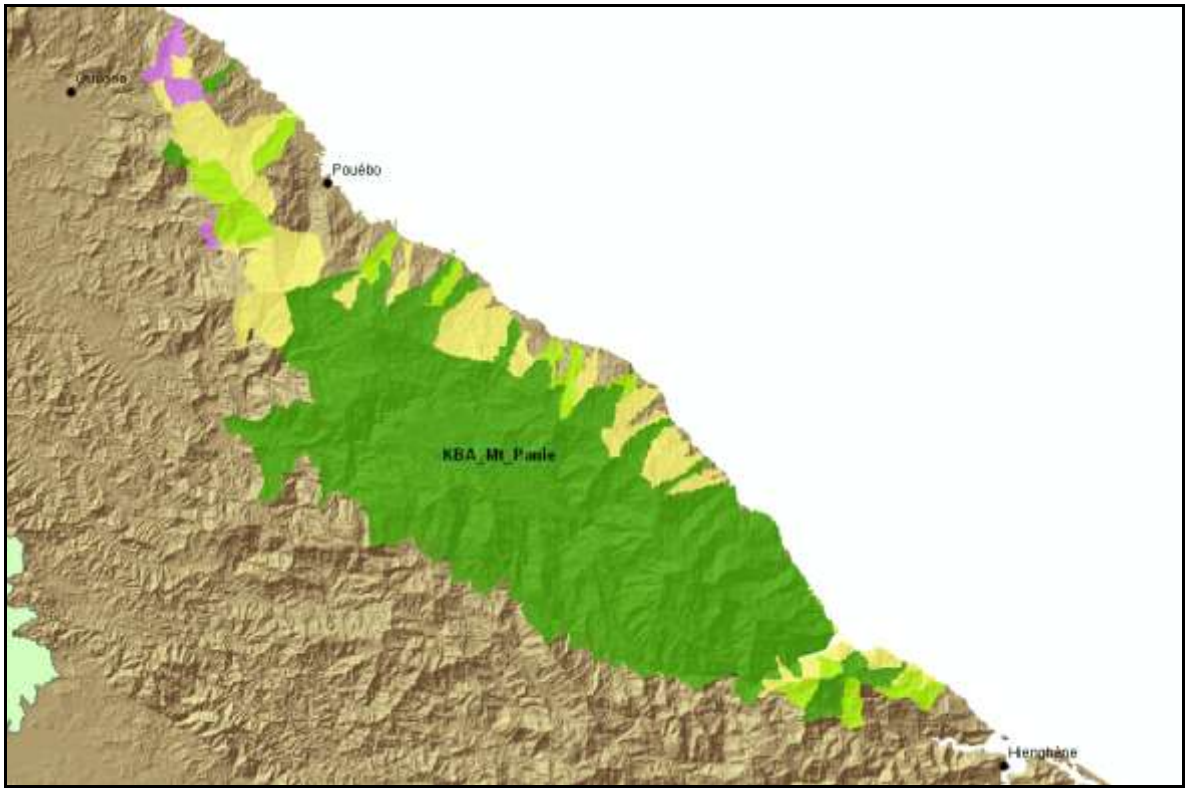
Land Ownership	% of KBA
NOUVELLE-CALEDONIE	39.47
PROVINCE NORD	0.35
PRIVE	53.66
TERRE COUTUMIERE	5.91
NON RENSEIGNEE	0.13

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	1.31	1.31
Travaux de recherche et exploitation	7.89	7.89
Travaux de recherche	10.70	11.30
Pas d'activité minière	5.40	5.40
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	7	

Mt Panié

The KBA Mt Panié strechtes from Hienghène up to Pouébo town are. Its entire size is 51,367.94 ha, consisting of

- CREN area size of 38,368.05 ha,
- VURRNP of 4412.37 ha, including VURRNP area of 777.30 which is not covered by CREN, and
- addon areas of 8,562.95 ha.



The KBA includes the Protected Area 'Mont Panié', the IBA 'Panié' as well as six protected water reservoirs (see below). The potential reptile habitat ranges of *Bavayia madjo* (RR) overlap in the southern half, and of *Caledoniscincus terma* (proposed CR) in the north. 63% of the KBA area is covered with humid forest. This also accounts for the KBA added areas, apart from the most southern ones. They were chosen for bridging the close geographical gap and coast-line continuity to the southern most CREN/VURRNP areas.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Gymnomyza aubryana*	CR	
Gastropods	*Placostylus caledonicus*		CR
Gastropods	*Placostylus eddystonensis*	VU	CR
Plantae	*Acropogon merytifolius*		CR
Plantae	*Agathis corbassonii*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Agathis moorei*	VU	VU
Plantae	*Alloschmidia glabrata*	VU	
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria schmidii*	VU	
Plantae	*Basselinia favieri*	VU	
Plantae	*Basselinia iterata*	VU	
Plantae	*Cleidion veillonii*	VU	
Plantae	*Diospyros nebulosa*	VU	
Plantae	*Diospyros trisulca*	VU	
Plantae	*Elaeocarpus colnettianus*	VU	
Plantae	*Elaeocarpus moratii*	VU	
Plantae	*Lavoixia macrocarpa*	CR	
Plantae	*Libocedrus chevalieri*	EN	CR
Plantae	*Libocedrus yateensis*	VU	EN
Plantae	*Neisosperma brevituba*	VU	
Plantae	*Parasitaxus usta*		VU
Plantae	*Pittosporum paniense*	VU	
Plantae	*Stenocarpus villosus*	CR	
Reptiles	*Dierogekko validiclavis*		EN
Reptiles	*Lioscincus steindachneri*		VU
Reptiles	*Nannoscincus exos*		CR
Reptiles	*Rhacodactylus leachianus*		EN

Statiastical Assessment:

Lithologie (1:1 Mio)	% of KBA
Argilites, cherts	**3.15**
Basaltes	**0.17**
Mélange ophiolitique	**5.76**
Micaschiste, gneiss	**90.83**
Serpentinites	**0.03**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**0.03**
Foret Humide	**63.27**
Foret Seche	**0**
Protected Area (Mont Panié)	**10.5**
Area Capatage d'eaux (Balade - Rive droite, Creek Pouirene, Creek Amene, Tchambouene, Yambe : Creek Garana, Creek Ouayat)	**3.32**

Mt Panié

Landuse - Occupation du Sol 2008/96	% of KBA
Broussaille	1.09
Eau douce	0.61
Eau marine	0.01
Forêt sur substrat volcano-sédimentaire	61.58
Mangrove clairsemée	0.005
Mangrove dense	0.02
Maquis ligno-herbacé	0.05
Maquis minier clairsemé	0.01
Maquis minier dense	0.04
Savane	14.33
Sol nu	0.004
Sol nu sur substrat ultramafique	0.02
Sol nu sur substrat volcano-sédimentaire	0.14
Végétation arbustive sur substrat volcano-sédimentaire	16.86
Végétation dense	5.04
Végétation éparse sur substrat ultramafique	0.01
Végétation éparse sur substrat volcano-sédimentaire	0.06
Zones d'habitation	0.12

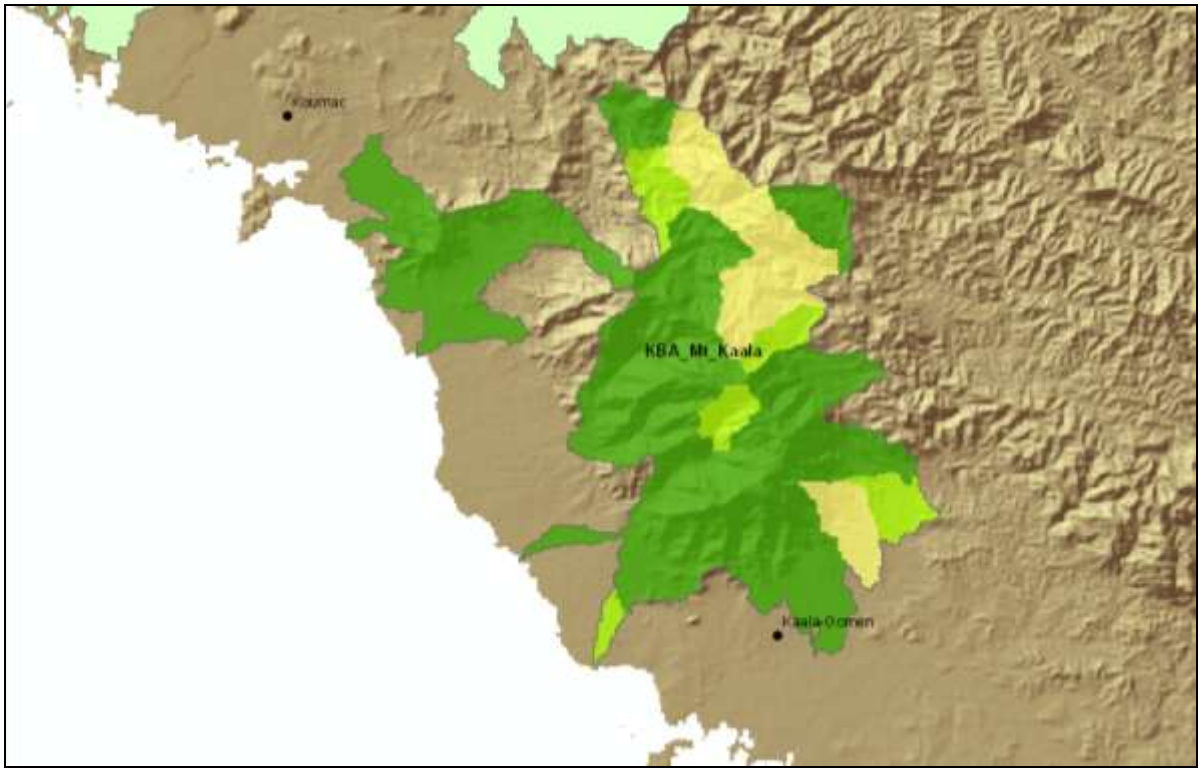
Land Ownership	% of KBA
ETAT FRANCAIS	0.001
NOUVELLE-CALEDONIE	72.34
PROVINCE NORD	0.14
COMMUNE	0.19
PRIVE	1.30
TERRE COUTUMIERE	25.44

Threats	% of KBA
No Mining records (as of 2010)	
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	46

Mount Kaala

The KBA mt Kaala is located on the west coast, bewteen the towns Kaala-Gomen and Koumac. The area size of the KBA is 7791.80 ha, and is made of the categories:

- CREN area (5,872.54 ha),
- VURRNP area (735.08 ha) and
- added areas (1,180.73 ha).



Most of the CREN areas show ultra morphic substrate (apart from CREN sections in the north). Humid forest cover is present in the northern parts of the added areas. Southern KBA areas intersect with the potential habitat of reptiles *Marmorosphax kaala* (proposed CR) and *Dierogekko kaalaensis* (proposed CR) whereas north-eastern KBA parts and most of the northern add-on patch intersect with the habitat of *Lioscincus greeri* (RR). These potential habitat ranges where not used as direct KBA trigger, however guided the process of selecting add-on areas of KBAs. Northern most parts of the KBA include areas of dry forest. The KBA also covers five small protected water reservoirs in the south (see table below).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus bondeensis*		CR
Gastropods	*Placostylus caledonicus*		CR
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria montana*		VU
Plantae	*Bikkia kaalaensis*	EN	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Bocquillonia longipes*	EN	
Plantae	*Casearia kaalaensis*	EN	
Plantae	*Cassine brachycremastra*		EN
Plantae	*Celtis hypoleuca*	EN	
Plantae	*Deltaria brachyblastophora*		CR
Plantae	*Elaeocarpus kaalensis*		EN
Plantae	*Homalium mathieuanum*	EN	
Plantae	*Leptostylis petiolata*	VU	
Plantae	*Medicosma exigua*		EN
Plantae	*Pittosporum collinum*	VU	
Plantae	*Planchonella contermina*		EN
Plantae	*Planchonella kaalaensis*		EN
Plantae	*Pycnandra kaalaensis*	VU	
Plantae	*Vitex evoluta*	EN	
Reptiles	*Dierogekko kaalaensis*		CR
Reptiles	*Marmorosphax kaala*		CR

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**2.96**
Argilites, cherts, calcaires	**17.50**
Basaltes, dolérites	**16.02**
Flysch	**12.55**
Péridotites	**37.60**
Serpentinites	**13.37**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**48.74**
Foret Humide	**2.30**
Foret Seche	**0.9**
Area Capatage d'eaux (Tribu de Baguanda, Tribu de St Pierre, Paita-Menga, Gomen Centre, Kaala-Gomen)	**5.78**

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	**0.003**
Forêt sur substrat ultramafique	**2.18**
Forêt sur substrat volcano-sédimentaire	**6.06**
Mangrove clairsemée	**0.01**
Mangrove dense	**0.0031**

Mount Kaala

Maquis dense paraforestier	13.18
Maquis ligno-herbacé	23.13
Maquis minier clairsemé	0.03
Maquis minier dense	0.02
Savane	36.42
Sol nu	0.11
Sol nu de mangrove	0.03
Sol nu sur substrat ultramafique	1.10
Sol nu sur substrat volcano-sédimentaire	0.44
Végétation arbustive sur substrat volcano-sédimentaire	15.32
Végétation dense	0.01
Végétation éparse sur substrat ultramafique	1.76
Végétation éparse sur substrat volcano-sédimentaire	0.09
Zones d'habitation	0.11

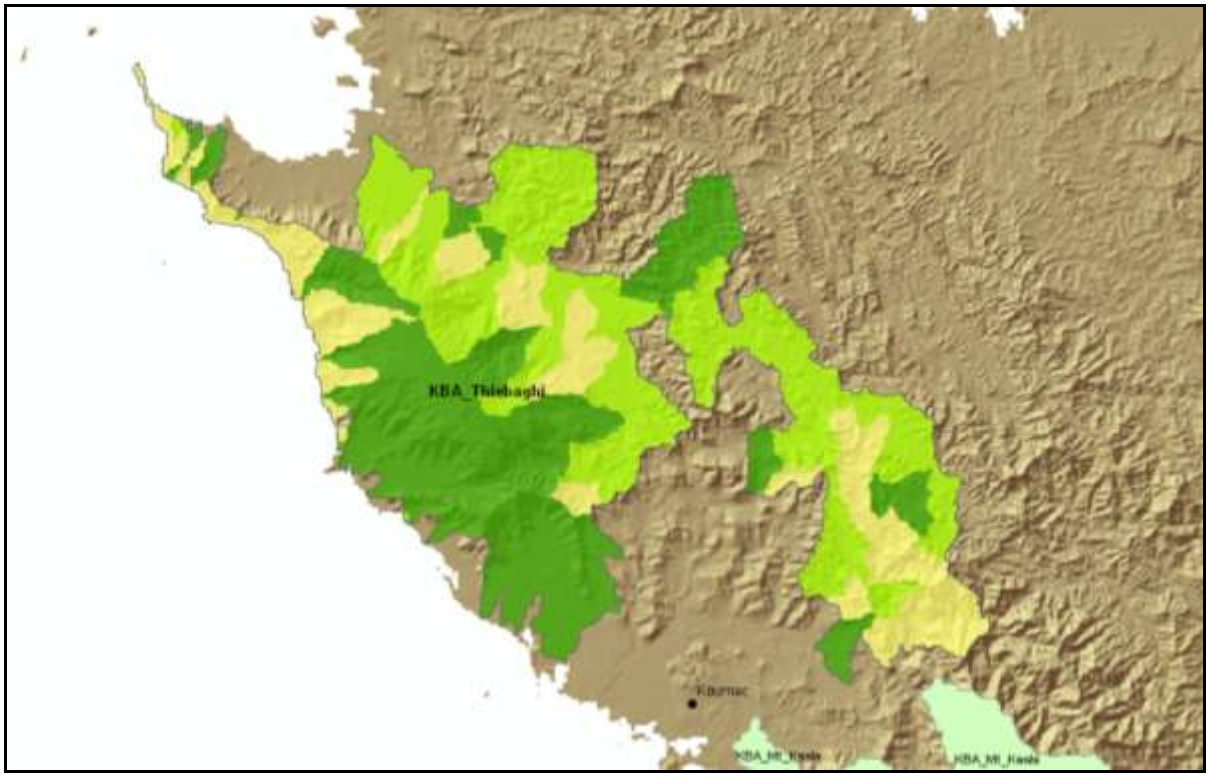
Land Ownership	% of KBA
ETAT FRANCAIS	0.50
PROVINCE NORD	0.05
NOUVELLE-CALEDONIE	74.91
COMMUNE	1.81
PRIVE	9.88
TERRE COUTUMIERE	11.99
NON RENSEIGNEE	0.81

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	0.21	0.21
Travaux de recherche et exploitation	16.78	16.78
Travaux de recherche	0.42	0.88
Pas d'activité minière	8.41	8.41
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	9	

Thiebaghi

TH KBA Thiebaghi (PN) is north Koumac, and borders the west coast, but also stretches further inland. The area size is 18,730.41 ha, with

- CREN covering 7,443.45 ha,
- VURRNP area size of 7,236.36 ha and
- added areas with 4,050.59 ha



North-eastern areas of the KBA as well as the eastern elongated parts cover long stretched of dry forest. The latter are also characterised by stretched slivers of ultra morphic substrate (in north-south direction). Coastal (up to the very south)and central parts of the KBA also have large overlaps with this type of geology. Apart from the eastern inland extended areas, most of the KBa represents a potential reptile habitat for *Dierogekko nehoueensis* (), and south eastern part of the stretched appendage intersect with the potential habitat area of *Lioscincus greeri* (RR) (also part of KBA Kaala). The KBA contains one water reservoir. Coastal add-on areas fully overlap with ultramorphic substrate, central added areas do also have around half intersection with this substrate. Eastern most added areas contain a lot of dry forest patches and small fragments of humid forest. The KBA contains one protected water reservoir (Paagoumene). 3.1% of the KBA areas represent potential habitats for endangered plants, modelled through a multi-parameter prediction.

Species :

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus bondeensis*		CR
Gastropods	*Placostylus caledonicus*		CR
Plantae	*Albizia guillainii*	VU	
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Araucaria scopulorum*	EN	EN
Plantae	*Bikkia lenormandii*	EN	
Plantae	*Bocquillonia castaneifolia*	EN	
Plantae	*Cassia artensis*	EN	
Plantae	*Cassine brachycremastra*		EN
Plantae	*Codiaeum oligogynum*		EN
Plantae	*Cupaniopsis squamosa*	EN	
Plantae	*Hemigraphis neocaledonica*		EN
Plantae	*Homalium mathieuanum*	EN	
Plantae	*Homalium polystachyum*	EN	
Plantae	*Iteiluma pinifolium*		EN
Plantae	*Macadamia angustifolia*		EN
Plantae	*Medicosma gracilis*		EN
Plantae	*Myricanthe discolor*		EN
Plantae	*Neisosperma sevenetii*	EN	
Plantae	*Oxanthera neocaledonica*	EN	
Plantae	*Planchonella contermina*		EN
Plantae	*Planchonella koumaciensis*		EN
Plantae	*Podocarpus longefoliolatus*		EN
Plantae	*Pouteria pinifolia*	EN	
Plantae	*Pycnandra kaalaensis*	VU	
Plantae	*Tephrosia leratiana*		EN
Plantae	*Vitex evoluta*	EN	
Reptiles	*Dierogekko nehoueensis*		CR
Reptiles	*Kanakysaurus viviparus*		EN
Reptiles	*Oedodera marmorata*		CR
Reptiles	*Rhacodactylus chahoua*		VU

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**15.91**
Argilites, cherts, calcaires	**36.75**
Basaltes, dolérites	**0.68**
Cuirasses	**5.75**

Thiebaghi

Flysch	2.63
Flysch monogénique basaltique	0.29
Péridotites	34.04
Serpentinites	3.80

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	37.85
Foret Humide	1.45
Foret Seche	3.60
Area Capatage d'eaux (Paagoumene)	1.05

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	0.27
Forêt sur substrat ultramafique	0.18
Forêt sur substrat volcano-sédimentaire	4.45
Mangrove clairsemée	0.01
Mangrove dense	0.004
Maquis dense paraforestier	5.75
Maquis ligno-herbacé	19.98
Savane	50.26
Sol nu sur substrat ultramafique	1.11
Sol nu sur substrat volcano-sédimentaire	0.63
Végétation arbustive sur substrat volcano-sédimentaire	14.12
Végétation éparse sur substrat ultramafique	2.52
Végétation éparse sur substrat volcano-sédimentaire	0.66
Zones d'habitation	0.05

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	72.55
PROVINCE NORD	10.65
COMMUNE	0.20
PRIVE	13.62
TERRE COUTUMIERE	1.57
NON RENSEIGNEE	0.66

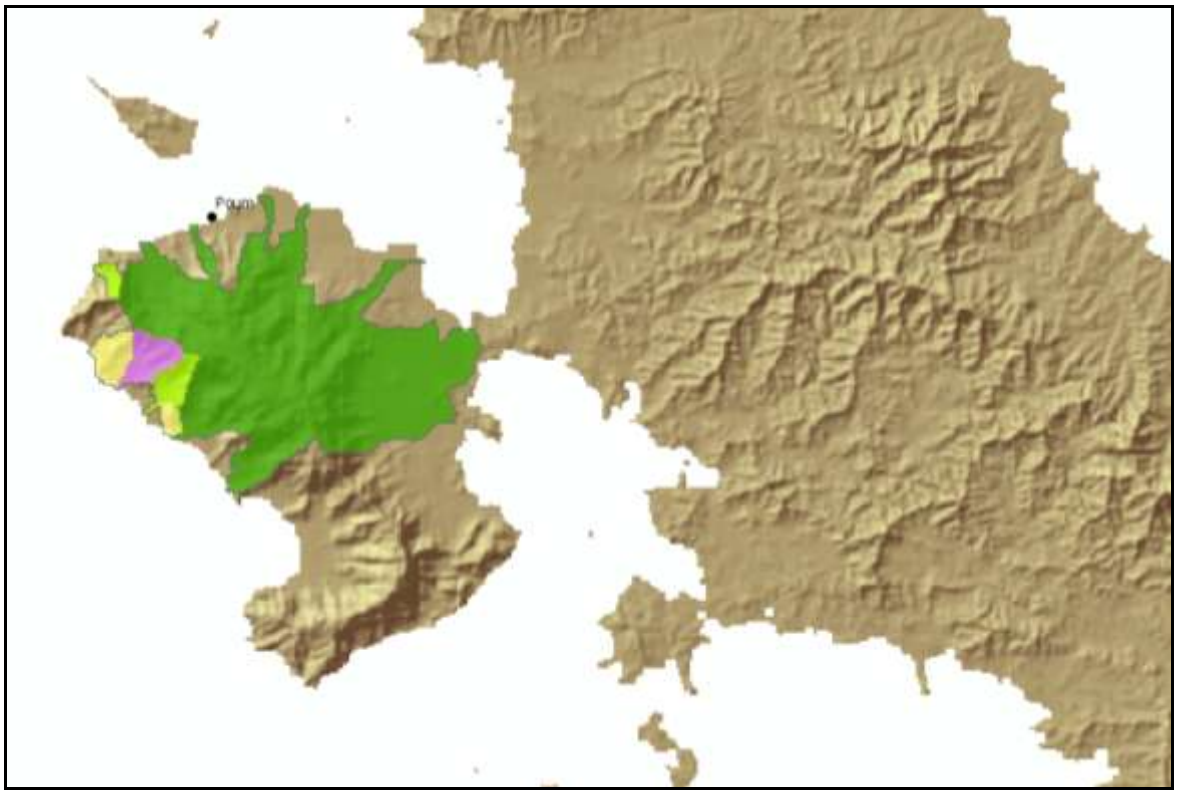
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	1.25	1.25
Travaux de recherche et exploitation	10.74	10.74
Travaux de recherche	13.13	13.13

Pas d'activité minière	**17.06**	**17.05**
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	**36**	

Poum

The KBA Poum in the very north south of the town Poum, has an area size of 1502.01 ha. This consists of

- CREN area (1,326.21 ha),
- VURRNP area (112.47 ha), including VURRNP area of 54.12 ha which is not covered by CREN,
- Added areas of 61.03 ha.



The plant *Eugenia ericoides* (VU), represented by the VURRNP patch is not covered by any CREN area of the KBAs. The add-on areas in the west at the coast cover predicted habitats of endangered plants (5.03% of KBA), and their soil substrate is also characterised through ultra morphic geology. The protected water reservoir (Village de Poum et Tribu de Titch) is located in the centre of the KBA. The KBA represents the potential habitat range of the reptiles *Dierogekko poumensis* (proposed CR) and *Dierogekko inexpectatus* (proposed CR).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus porphyrostomus*	VU	
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria scopulorum*	EN	EN
Plantae	*Cassine brachycremastra*		EN
Plantae	*Eugenia ericoides*	VU	
Plantae	*Myricanthe discolor*		EN
Plantae	*Oxanthera neocaledonica*	EN	

Poum

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Pouteria pinifolia*	EN	
Plantae	*Tephrosia leratiana*		EN
Reptiles	*Dierogekko inexpectatus*		CR
Reptiles	*Dierogekko poumensis*		CR
Reptiles	*Kanakysaurus viviparus*		EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**3.19**
Argilites, cherts, calcaires	**15.78**
Cuirasses	**14.22**
Péridotites	**66.61**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**66.61**
Area Capatage d'eaux (Village de Poum et Tribu de Titch)	**12.05**

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	**0.02**
Eau marine	**0.01**
Forêt sur substrat volcano-sédimentaire	**2.71**
Mangrove dense	**0.005**
Maquis dense paraforestier	**4.82**
Maquis ligno-herbacé	**34.45**
Savane	**30.64**
Sol nu sur substrat ultramafique	**8.21**
Sol nu sur substrat volcano-sédimentaire	**0.45**
Végétation arbustive sur substrat volcano-sédimentaire	**2.90**
Végétation éparse sur substrat ultramafique	**14.81**
Végétation éparse sur substrat volcano-sédimentaire	**0.72**
Zones d'habitation	**0.26**

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	**81.97**
PROVINCE NORD	**1.18**
COMMUNE	**1.33**
PRIVE	**3.66**
TERRE COUTUMIERE	**11.40**
NON RENSEIGNEE	**0.21**

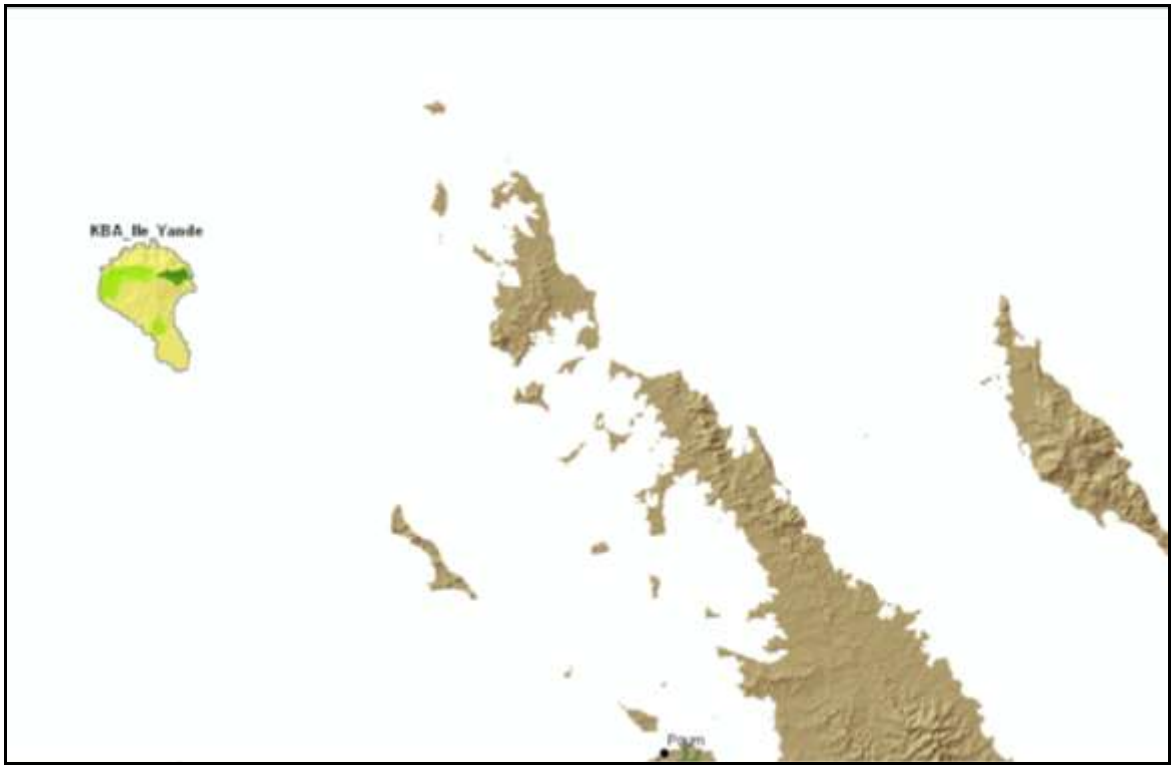
Poum

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Travaux de recherche et exploitation	**56.70**	**56.70**
Travaux de recherche	**12.19**	**12.24**
Pas d'activité minière	**5.12**	**15.64**
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	**4**	

Ile Yandé

The KBA Ile Yandé is the northern most KBA, and is part of Northen Province. The area size is 1322.56 ha, consisting of areas

- CREN (63.14 ha),
- VURRNP (238.37 ha) and
- added areas of 1,015.48 ha.



The KBA follows the delineation of the IBA Yandé. The CREN trigger of KBA is the plant *Planchonella contermina*(EN), the VURRNP areas consist of RR classified species. Most of the island has ultra morphic geology. The western coast is covered by humid forest.

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Cuirasses	**16.62**
Péridotites	**80.92**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**80.92**
Foret Humide	**11.08**
Area Capatage d'eaux (Paagoumene)	

Landuse - Occupation du Sol 2008/96	% of KBA
Eau douce	0.29
Forêt sur substrat ultramafique	6.51
Forêt sur substrat volcano-sédimentaire	11.92
Mangrove clairsemée	0.20
Mangrove dense	0.33
Maquis dense paraforestier	14.80
Maquis ligno-herbacé	11.83
Savane	7.44
Sol nu sur substrat ultramafique	17.14
Sol nu sur substrat volcano-sédimentaire	0.14
Tanne	0.01
Végétation arbustive sur substrat volcano-sédimentaire	2.58
Végétation éparse sur substrat ultramafique	24.89
Végétation éparse sur substrat volcano-sédimentaire	1.80
Zones d'habitation	0.11

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	87.68
PROVINCE NORD	10.22

Missing data to 100% is due to varying delineation of spatial layers

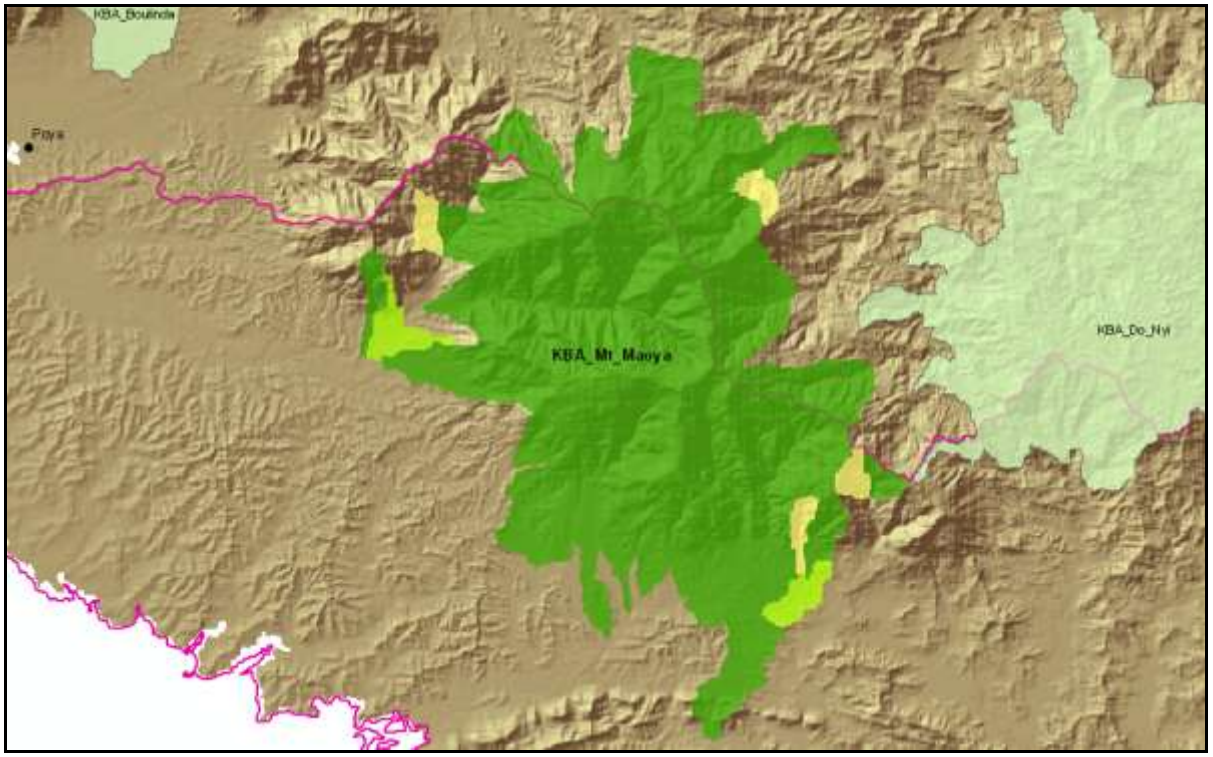
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Pas d'activité minière	9.57	9.57
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	0	

Ile Yandé

Mt Maoya

The KBA Mt Maoya is located west of Poya and is crossed by the border Province Sud/Nord. It is east of KBA Do Nyi. The Mt Moaya KBa has an area size of 18343.48 ha, with the areas

- CREN (17,306.89 ha),
- VURRNP (493.44 ha) and
- added areas (539.89 ha).



The KBA Maoya stretches over the provincial border (Province Sud/Province Nord, purple line).

The KBA is overlapping with entire IBA Nord Me Maoya and most of IBA Sud Me Maoya. South western fragments of the IBA were not considered as these areas do neither contain forested nor other conservation relevant characteristics. Centre and northern core parts of the KBA are forested (humid forest), so are the two added patches in the north and one in the south east. All added areas are of ultra morphic substrate, which also covers most non-forested areas of the KBA. Five protected water reservoirs and the Protected Area (Nodela) lye within the KBA. All endangered birds listed below were observed in both IBAs (Nord Me Maoya and Sud Me Maoya).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus porphyrostomus*	VU	
Plantae	*Agathis corbassonii*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Agathis moorei*	VU	VU
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Medicosma suberosa*		EN
Plantae	*Phyllanthus baraouaensis*		EN
Plantae	*Podocarpus longifoliolatus*	EN	EN
Plantae	*Podocarpus polyspermus*	VU	EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Argilites, cherts, calcaires	**0.78**
Basaltes, dolérites	**22.71**
Ensemble polymétamorphique indifférencié	**5.14**
Flysch	**1.56**
Péridotites	**69.60**
Serpentinites	**0.21**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**48.36**
Foret Humide	**40.37**
Foret Seche	**0**
Protected Area (Nodela)	**5.0**
Area Capatage d'eaux (Riviere Nekouie, Riviere Karagreu, Riviere Djiaouma, Riviere Baraoua, Bourail : Creek Daoui)	**16.87**

Landuse - Occupation du Sol 2008/96)	% of KBA
Broussaille	**1.11**
Eau douce	**0.14**
Forêt sur substrat ultramafique	**34.71**
Forêt sur substrat volcano-sédimentaire	**5.93**
Maquis dense paraforestier	**12.10**
Maquis ligno-herbacé	**16.01**
Maquis minier clairsemé	**0.01**
Maquis minier dense	**0.31**
Savane	**15.75**
Savane	**0.20**
Sol nu sur substrat ultramafique	**0.43**
Sol nu sur substrat volcano-sédimentaire	**0.06**

Mt Maoya

Végétation arbustive sur substrat volcano-sédimentaire	4.57
Végétation dense	4.08
Végétation éparse sur substrat ultramafique	4.53
Végétation éparse sur substrat volcano-sédimentaire	0.06
Zones d'habitation	0.01

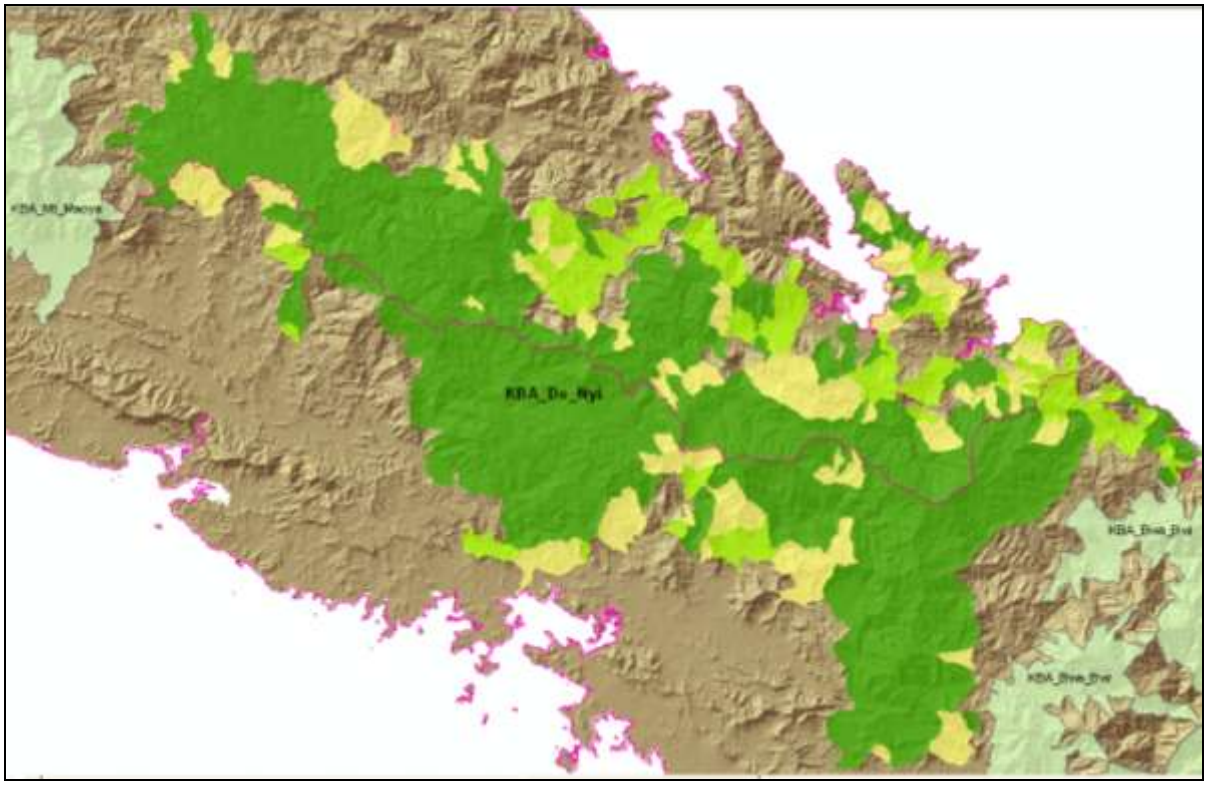
Land Ownership	% of KBA
NOUVELLE-CALEDONIE	71.12
PROVINCE SUD	5.01
COMMUNE	0.26
PRIVE	19.85
TERRE COUTUMIERE	3.36
NON RENSEIGNEE	0.19

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	1.80	1.80
Travaux de recherche et exploitation	3.08	3.08
Travaux de recherche	8.23	14.09
Pas d'activité minière	6.34	8.08
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	11	

Do Nyi

The KBA Do Nyi stretches over the border of Province Nord and Sud, and it covers an area of 152,591.05 ha. The KBA consists of

- CREN 109,518.42 ha,
- VURRNP areas 18,373.62 ha,
- VU Bird observation point (recorded outside IBA) with 102.10 ha and
- added areas of 24,720.79 ha.



The KBA Do Nyi is part of both Province Sud and Province Nord (purple line shows the provincial border). Bird observation point (*Cyanoramphus saisseti*, VU) outside the IBA is mapped in the north (small pink area in the north).

The KBA comprises seven IBAs (Table Unio, Entre Mont Rembaï et Mont Canala, Entre Plateau Dogny et Mont Canala, Prokoméo, Houaïlou-Néoua, Entre Mont Do et Mont Nakada, Nord Mont Nakada). It also overlaps with 25 protected water reservoirs, and two Protected areas. The majority of the CREN areas represent IBAs and dense humid forest. Overlaps of potential reptile habitats of *Caledoniscincus cryptos* and *Nannoscincus slevini* in central eastern section of the KBA, and of *Bavayia pulchella* in the north-west of the KBA.
North eastern add-on areas are slected because of their significance of ultramorphic soil characteristic, and the big patch of the latter links to a bird observation of *Cyanoramphus saisseti* (VU) recorded outside the IBA Houaïlou-Néoua. North western add-on patches also include 2 small water reservoirs (Azareu, Pothe et Ny : Creek Ouego; Gouaro, Pothe et Ny) and contain three bird observation sites of *Cyanoramphus saisseti* (VU) recorded outside the IBA Houaïlou-Néoua. Same observations of this bird were recorded further south west where a larger add-on area was selected, also overlapping with the water reservoir 'Ema, Nanon Et Kenerou : Creek Ouen Mehoue', and

containing significant amount of dense humid forest. The latter characteristics also accounts for further eastern smaller add-on areas chosen as well as for southern add-on areas. The southern most add-on area links a CREN patch further south to main CREN areas of the KBA, and includes the water reservoir 'Nassirah : Riviere Oua Ia'.
Huge amount of fire occurance (105) was identified using weekly image time series (MODIS, observation time span form 2000 to 2010). It has to considered that this KBa covers a relatively large area, that stretches over 75 km north-soth, and up to 30 km east-west.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus eddystonensis*	VU	CR
Gastropods	*Placostylus fibratus*	VU	EN
Mammals	*Pteropus vetulus*	VU	
Plantae	*Agathis corbassonii*	VU	
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis moorei*	VU	VU
Plantae	*Agathis ovata*		EN
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria luxurians*	EN	EN
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Araucaria scopulorum*	EN	EN
Plantae	*Austrobuxus cracens*	VU	
Plantae	*Basselinia tomentosa*	VU	
Plantae	*Basselinia vestita*	VU	
Plantae	*Celtis hypoleuca*	EN	
Plantae	*Cleidion marginatum*	VU	
Plantae	*Cupaniopsis rosea*	EN	
Plantae	*Dendrobium munificum*		CR
Plantae	*Diospyros margaretae*	VU	
Plantae	*Diospyros perplexa*	VU	
Plantae	*Dysoxylum pachypodum*	CR	
Plantae	*Justicia pinensis*		EN
Plantae	*Kentiopsis oliviformis*	EN	
Plantae	*Oxanthera undulata*	CR	
Plantae	*Phyllanthus petchikaraensis*		EN
Plantae	*Pittosporum ornatum*	EN	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Podocarpus longifoliolatus*	EN	EN
Plantae	*Schefflera veitchii*	EN	
Plantae	*Sloanea lepida*	VU	
Plantae	*Stenocarpus villosus*	CR	
Plantae	*Tephrosia leratiana*		EN
Plantae	*Zygogynum oligostigma*	EN	
Reptiles	*Lioscincus maruia*		EN
Reptiles	*Lioscincus steindachneri*		VU
Reptiles	*Nannoscincus gracilis*		VU

Statistical assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**0.57**
Argilites, cherts, calcaires	**3.64**
Argilites, grès, charbons	**1.79**
Basaltes, dolérites	**3.23**
Cuirasses	**2.15**
Ensemble polymétamorphique indifférencié	**33.74**
Flysch	**1.42**
Gabbros, dolérites, basaltes	**3.88**
Grès volcanoclastiques	**25.39**
Péridotites	**13.72**
Serpentinites	**10.40**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**23.58**
Foret Humide	**54.29**
Foret Seche	
Protected Area (Mont Do, Col d'Amieu)	**∑ 7.4** -- 0.2; 7.2
Area Capatage d'eaux (TRIBUS DE COULA ET BOREARE, GOUARO POTHE ET NY, GOUARO Poethe Ny, AZAREU POTHE ET NY : CREEK OUEGO, TRIBUS DE KONOYES, SAHOUE, OUEROU, PIMET ET MECHIN : CREEK NIRE, TRIBU DE NEOUA : AFFLUENT DE LA RIVIERE NOZE, AMON KASSIORI ET OUENA, TENE, BOAKAINE, NAKETY : RIVIERE OUEN NOH, TRIBU DE KOH : RIVIERE DE KOH, TRIBU DE KATRIKOIN - TABLE UNIO, EMA NANON ET KENEROU : CREEK OUEN MEHOUE, TRIBUS DE MIA ET KUINE : RIVIERE NIMBOUE, RIVIERE OUEN AHVIA, MOINDOU, FARINO, TRIBU DE PETIT COULI : CREEK ATE, FONWHARY, TRIBU DE KOINDE, TRIBU DE GRAND COULI : RIVIERE FONWHARY, LA FOA : CREEK OUEN KANDU – DOGNY, SARRAMEA : CREEK FO OUIA, TENDEA, OUIPOIN : CREEK OUEN OMBA, NASSIRAH : RIVIERE OUA IA, KOUERGOA 2, OUAMENIE F1 et F2, TABLE UNIO 2, TRIBU DE NEOUA : AFFLUENT DE LA RIVIERE NOZE)	**18.71**

Landuse - Occupation du Sol 2008/96)	% of KBA
Broussaille	**0.26**
Eau douce	**0.27**
Eau marine	**0.001**

Do Nyi

Forêt sur substrat ultramafique	11.11
Forêt sur substrat volcano-sédimentaire	45.97
Mangrove clairsemée	0.005
Mangrove dense	0.03
Maquis dense paraforestier	7.40
Maquis ligno-herbacé	4.62
Maquis minier clairsemé	0.002
Maquis minier dense	0.03
Nuages	0.01
Savane	9.54
Sol nu	0.0001
Sol nu sur substrat ultramafique	0.84
Sol nu sur substrat volcano-sédimentaire	0.02
Tanne	0.001
Végétation arbustive sur substrat volcano-sédimentaire	13.52
Végétation dense	1.20
Végétation éparse sur substrat ultramafique	4.71
Végétation éparse sur substrat volcano-sédimentaire	0.12
Zones d'habitation	0.29
Zones sombres (non interprétables)	0.06

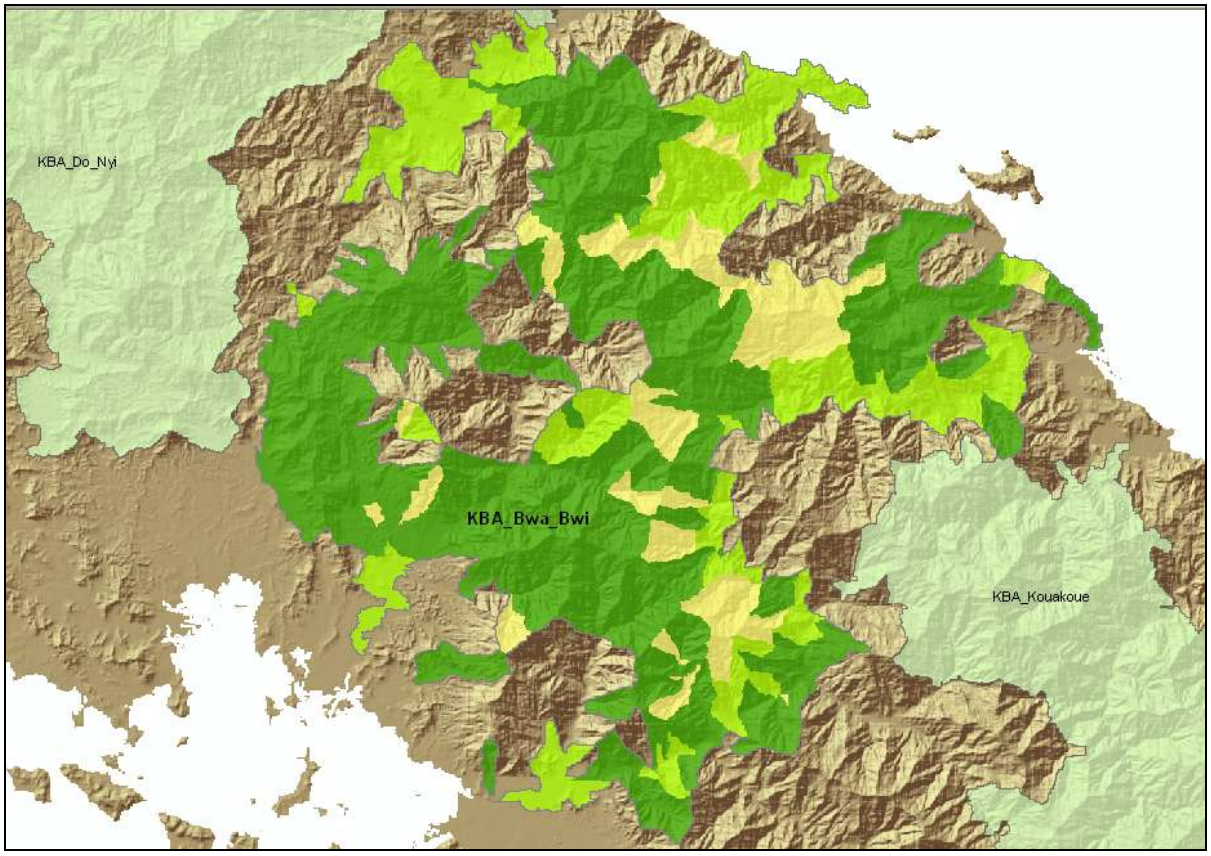
Land Ownership	% of KBA
ETAT FRANCAIS	0.004
NOUVELLE-CALEDONIE	54.74
PROVINCE NORD	3.64
PROVINCE SUD	7.39
COMMUNE	0.34
PRIVE	12.95
TERRE COUTUMIERE	20.03
NON RENSEIGNEE	0.58

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	1.01	1.01
Travaux de recherche et exploitation	4.53	4.54
Travaux de recherche	4.89	5.14
Pas d'activité minière	4.23	4.23
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	105	

Bwa Bwi

The KBA Bwa Bwi has an area size of 70,902.70 ha. It contains

- CREN areas with 44,638.06 ha
- VURRNP areas with 17,617.81 ha and
- added areas of 8,636.27 ha size.



The KBA Bwa Bwi comprises five IBAs (Pic Ningua, Nassirah, Cidoa-Bwa Bwi, Koum, Dent de St Vincent), and overlaps with two Protected Areas (Pic Ningua, Foret de Saille). Almost ¾ of the KBA (western side) are on ultramorphic geoplogy. This and high density of humid forest was a criteria for choosing north-eastern add-on patches as well as establishing links between the two IBAs Cidoa-Bwa Bwi and Koum, and sub-catchments of rivers Xwê Bwi (south of addon area, fish *Sicyopterus sarasini,* and Crustacés *Paratya bouvieri*), Tô De and Neuméni (north, fish *Sicyopterus lagocephalus*, Crustacés *Paratya bouvieri*). Southern added areas were inside the large protected water reservoir 'Forage de la Tontouta', and linkage to most southern CREN and VU areas of this KBA with around 90 endangered plant and 55 reptile observation sites. The added sire in south-west represents a link on ultramorphic soil substrate to observation sites of the plant *Xanthostemon francii* (proposed EN) and the snail *Placostylus fibratus* (proposed EN). The western part of the KBA shows an add-on area to the north that is on ultramorphic ground and linking to the triangulated plant site (VURRNP) of *Acmopyle pancheri* (RR). The norther central (N-S elongated) added area fill the gap of CREN areas, avoiding isolation of the plant observaqtion site of *Podocarpus longifoliolatus* (EN) and overlaps with the IBA Cidoa-Bwa Bwi and the 'Forage de la Tontouta' water reservoir. Eastern most added

area at the coast links to the coastal CREN site of plant *Celtis hypoleuca* (EN), and overlaps with the potential habitat modelled/estimated for plant *Araucaria scopulorum* (EN). In general, 0.24 % of this large KBA covers predicted habitat for endangered plants.

A large amount of fires could be identified based on remote assessment of MODIS satellite imagery during a 11 year time span (2000 – 2010).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Birds	*Eunymphicus cornutus*	VU	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus fibratus*	VU	EN
Plantae	*Acropogon bosseri*		EN
Plantae	*Agathis ovata*		EN
Plantae	*Alloschmidia glabrata*	VU	
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria luxurians*	EN	EN
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Beauprea penariensis*		EN
Plantae	*Callitris sulcata*	EN	EN
Plantae	*Canacomyrica monticola*	EN	
Plantae	*Celtis hypoleuca*	EN	
Plantae	*Cerberiopsis neriifolia*	EN	
Plantae	*Cocconerion minus*	VU	
Plantae	*Cupaniopsis tontoutensis*	EN	
Plantae	*Diospyros margaretae*	VU	
Plantae	*Elaeocarpus kaalensis*		EN
Plantae	*Hibbertia margaretae*		CR
Plantae	*Homalium betulifolium*	EN	
Plantae	*Leptostylis petiolata*	VU	
Plantae	*Phyllanthus paucitepalus*		EN
Plantae	*Podocarpus longifoliolatus*	EN	EN
Plantae	*Semecarpus riparia*	EN	
Plantae	*Xanthostemon francii*		EN
Plantae	*Xanthostemon longipes*		EN
Reptiles	*Nannoscincus mariei*		VU

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**2.04**
Argilites, cherts, calcaires	**1.60**
Basaltes, dolérites	**2.14**
Flysch	**8.95**
Gabbros, dolérites, basaltes	**0.38**
Granite	**0.87**
Grès volcanoclastiques	**2.69**
Péridotites	**79.70**
Serpentinites	**1.59**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**71.02**
Foret Humide	**25.05**
Foret Seche	**0**
Protected Area (PIC NINGUA, FORET DE SAILLE)	**∑ 2.03 --** 0.51; 1.52
Area Capatage d'eaux (THIO, FORAGES DE LA OUENGHI, FORAGE DE LA TONTOUTA, KOUERGOA 2, OUINANE-TOMO : CREEK OUINANE, TOMO : RIVIERE BAGHA)	**48.80**

Landuse - Occupation du Sol (2008/96)	% of KBA
Broussaille	**0.01**
Eau	**0.0027**
Eau douce	**1.29**
Eau marine	**0.00**
Forêt sur substrat ultramafique	**26.84**
Forêt sur substrat volcano-sédimentaire	**5.40**
Mangrove clairsemée	**0.0025**
Mangrove dense	**0.01**
Maquis dense paraforestier	**25.30**
Maquis ligno-herbacé	**21.15**
Maquis minier clairsemé	**0.02**
Maquis minier dense	**0.07**
Savane	**5.81**
Sol nu	**0.02**
Sol nu de mangrove	**0.0033**
Sol nu sur substrat ultramafique	**0.44**
Sol nu sur substrat volcano-sédimentaire	**0.20**
Tanne	**0.002**
Végétation arbustive sur substrat volcano-sédimentaire	**6.70**
Végétation dense	**0.04**

Végétation éparse sur substrat ultramafique	6.63
Végétation éparse sur substrat volcano-sédimentaire	0.02
Zones cultivées, labours	0.01
Zones d'habitation	0.05

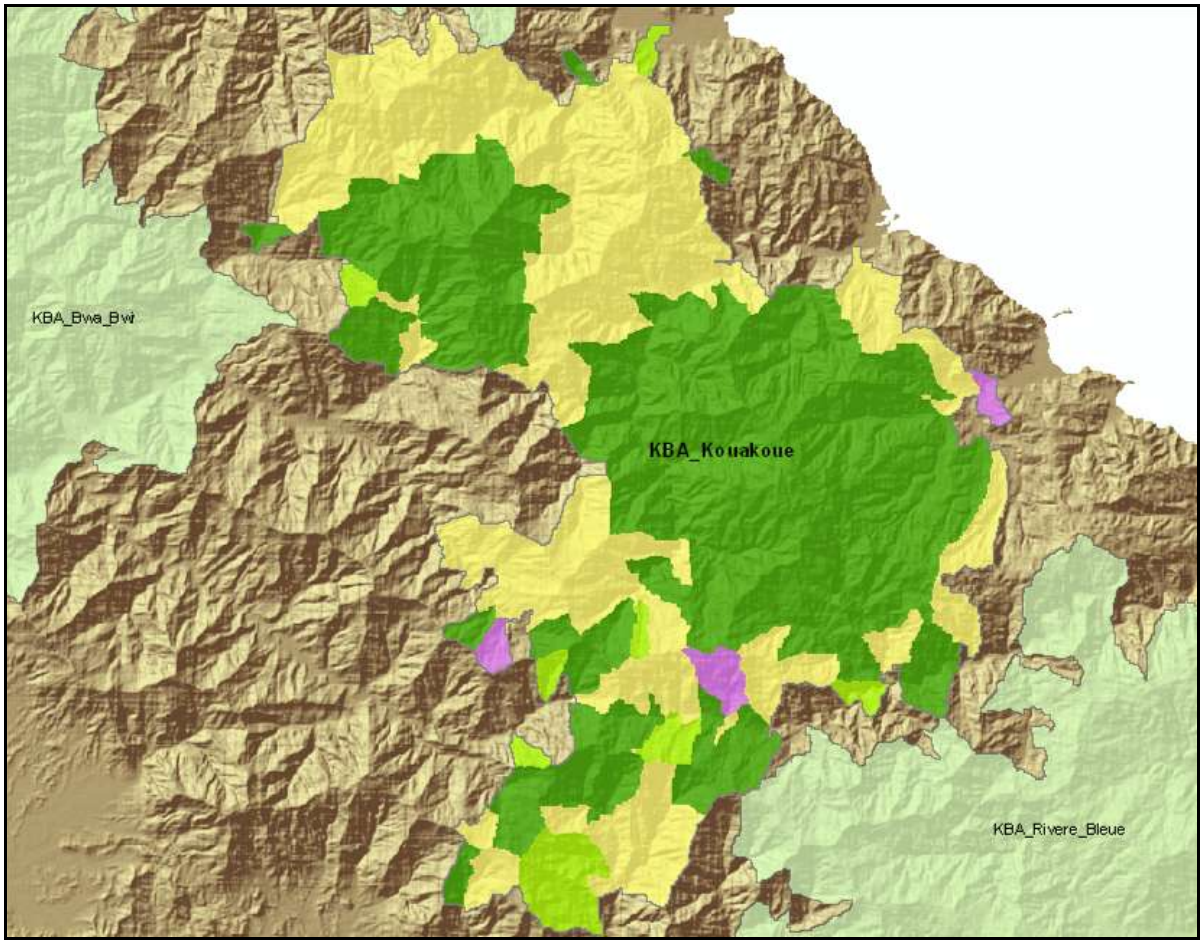
Land Ownership	% of KBA
NOUVELLE-CALEDONIE	80.72
PROVINCE SUD	0.17
COMMUNE	0.12
PRIVE	10.58
TERRE COUTUMIERE	7.14
NON RENSEIGNEE	0.20

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	4.64	4.64
Travaux de recherche et exploitation	6.06	6.06
Travaux de recherche	8.21	10.54
Pas d'activité minière	22.63	25.55
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	50	

Kouakoué

The KBA Kouakoué in Province Sud represents most of the northern half of the IBA Humboldt-Kouakoué, with the endangered species *Cyanoramphus saisseti* (VU). The total area size of the KBA is 41220.25 ha, with having

- CREN with 21,971.65 ha,
- VURRNP 2466.05 ha, (including 608.40 ha that are not covered by CREN areas) ,
- added area size of 16,773.53 ha.



The largest two CREN patches contain each a Protected Area (Humboldt and Kouakoue). Southern CREN fragments of the KBA contain around 187 plant species observations, with endangered spaecies such as *Canacomyrica monticola* (EN), and proposed CR species *Dendrobium munificum* and *Acropogon chalopiniae* as well as proposed EN species *Acropogon bosseri*, *Agathis ovata*, *Araucaria humboldtensis* and *Podocarpus beecherae*. In order to ensure a compact KBA structure it was decided to bond these patches with the main northern CREN zones. This concept was also supported through the uniform cover of humid forest within the bounds of this KBA Kouakoué. The large northern added area is covered with around four fifth (4/5) of dense humid forest. In addition, 2/3 of its southern part covers the potential habitat range of reptile *Sigaloseps ruficauda* (proposed VU), and ensures that northern CREN patches are part of this KBA (plants *Agathis ovata*, (proposed EN) and *Canacomyrica monticola* (EN)). Also all other add-on areas further south are equally

chracterised by high humid forest cover.South western added areas represent the potential reptile habitat of *Marmorosphax montana* (proposed VU). Generally, all added patches are on ultramorphic substrate.
Western most VURRNP area (purple) represents the (only)plant site of *Pandanus decastigma* (VU), which does not occur in CREN areas of any KBA. Same accounts for the two fish species in the more central (*Cestraeus plicatilis*) and western parts of the KBA (*Cestraeus oxyrhynchus*). The latter site also covers the two Crustacés species *Paratya intermedia* (RR) *and Paratya bouvieri* (RR). No fires were remotely detected, based on the MODIS satellite time series data (2000 – 2010).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Gastropods	*Placostylus fibratus*	VU	EN
Plantae	*Acropogon bosseri*		EN
Plantae	*Acropogon chalopiniae*		CR
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis ovata*		EN
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria humboldtensis*		EN
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Beauprea congesta*	EN	
Plantae	*Canacomyrica monticola*	EN	
Plantae	*Celtis hypoleuca*	EN	
Plantae	*Cloezia aquarum*		EN
Plantae	*Dendrobium munificum*		CR
Plantae	*Dracophyllum alticola*		EN
Plantae	*Lasiochlamys hurlimannii*	EN	
Plantae	*Libocedrus chevalieri*	EN	CR
Plantae	*Litsea imbricata*	EN	
Plantae	*Litsea stenophylla*		EN
Plantae	*Logania imbricata*		EN
Plantae	*Megastylis latissima*		EN
Plantae	*Megastylis paradoxa*		EN
Plantae	*Metrosideros punctata*	VU	
Plantae	*Metrosideros tetrasticha*		EN
Plantae	*Pandanus decastigma*	VU	
Plantae	*Parasitaxus usta*		VU
Plantae	*Podocarpus beecherae*		EN
Plantae	*Podocarpus decumbens*	VU	CR
Plantae	*Scaevola macropyrena*		EN
Plantae	*Semecarpus riparia*	EN	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Xanthostemon francii*		EN
Reptiles	*Graciliscincus shonae*		VU
Reptiles	*Nannoscincus mariei*		VU

Statistical assessment:

Lithologie (1:1 Mio)	% of KBA
Alluvions	**0.44**
Cuirasses	**0.67**
Dunites	**0.26**
Péridotites	**96.46**
Serpentinites	**2.17**

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**73.49**
Foret Humide	**72.64**
Foret Seche	**0**
Protected Area (KOUAKOUE, HUMBOLDT)	**∑ 21.99 --** 18.19; 3.8
Area Capatage d'eaux (VALLEE DE DUMBEA, FORAGE DE LA TONTOUTA)	**22.63**

Landuse - Occupation du Sol (2008/96)	% of KBA
Eau douce	**1.01**
Forêt sur substrat ultramafique	**74.34**
Forêt sur substrat volcano-sédimentaire	**0.20**
Maquis dense paraforestier	**15.20**
Maquis ligno-herbacé	**6.96**
Maquis minier clairsemé	**0.01**
Maquis minier dense	**0.02**
Savane	**0.00**
Sol nu	**0.00**
Sol nu de mangrove	**0.00**
Sol nu sur substrat ultramafique	**0.20**
Sol nu sur substrat volcano-sédimentaire	**0.00**
Végétation arbustive sur substrat volcano-sédimentaire	**0.21**
Végétation dense	**0.05**
Végétation éparse sur substrat ultramafique	**1.79**

Land Ownership	% of KBA
NOUVELLE-CALEDONIE	80.54

Kouakoué

PROVINCE SUD	19.22

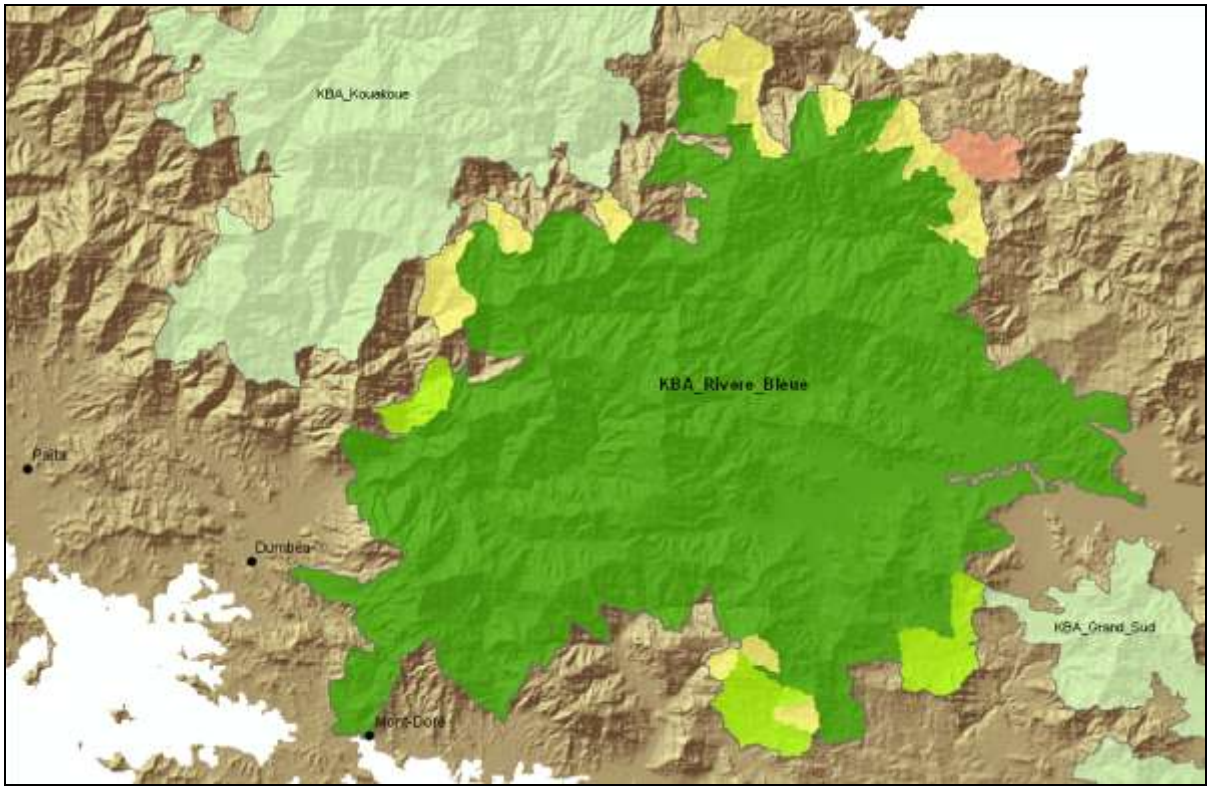
Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	**1.92**	**1.93**
Travaux de recherche et exploitation	**0.37**	**0.37**
Travaux de recherche	**1.87**	**1.87**
Pas d'activité minière	**8.49**	**12.43**
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	**0**	

Kouakoué

Rivière Bleue

The KBA Rivière Bleue extending north-east of Mont Dore in Province Sud has a total areas size of 48718.60 ha, and is a composite of

- CREN area of 42,997.68 ha,
- VURRNP area of 2,131.72 ha,
- VU Bird observation point (recorded outside IBA) with 475.02 ha and
- added area size of 3,103.63 ha.



Bird observation point (*Cyanoramphus saisseti*, VU) outside of IBA area (pink site, north-east).

The KBA covers a large part of the southern half of the IBA Humboldt-Kouakoué, with 2/3 of its area in the south. Peripheral added areas were selected based on the large dense cover of humid forest. The KBA covers five Protected Areas, four of them are relatively large. All of them are located in and make up the core CREN body of the KBA. The potential reptile habitat range of *Lioscincus greeri* (RR) is located in the centre of the KBA. Ultramorphic geology patches occur in larger western, northern and southern fringes. Western part of the KBA (ca. ¼ of the KBA size) overlaps with the protected water reservoir (Vallee de Dumbea). According to a computed multi-environmental-criteria estimation model, a small percentage of the KBA area size (0.2%) represents predicted habitat for endangered plants (*Agathis ovata* (proposed EN), *Araucaria muelleri* (proposed EN*), Araucaria scopulorum* (EN) and *Semecarpus riparia* (EN)).
The KBA Rivière Bleue touches the neighbouring northern KBA at two smaller sites.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Cyanoramphus saisseti*	VU	
Gastropods	*Placostylus fibratus*	VU	EN
Mammals	*Nyctophilus nebulosus*	CR	
Plantae	*Acropogon chalopiniae*		CR
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis moorei*	VU	VU
Plantae	*Agathis ovata*		EN
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria humboldtensis*		EN
Plantae	*Araucaria muelleri*		EN
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Callitris sulcata*	EN	EN
Plantae	*Canacomyrica monticola*	EN	
Plantae	*Cloezia aquarum*		EN
Plantae	*Dendrobium munificum*		CR
Plantae	*Gmelina lignum-vitreum*	CR	
Plantae	*Libocedrus yateensis*	VU	EN
Plantae	*Litsea stenophylla*		EN
Plantae	*Medicosma leratii*		EN
Plantae	*Megastylis latissima*		EN
Plantae	*Neisosperma thiollierei*	CR	
Plantae	*Neocallitropsis pancheri*	VU	EN
Plantae	*Nothofagus discoidea*	VU	
Plantae	*Parasitaxus usta*		VU
Plantae	*Pittosporum muricatum*	EN	
Plantae	*Podocarpus beecherae*		EN
Plantae	*Podocarpus decumbens*	VU	CR
Plantae	*Podocarpus longifoliolatus*	EN	EN
Plantae	*Pouteria pinifolia*	EN	
Plantae	*Retrophyllum minor*	EN	CR
Plantae	*Solanum pseuderanthemoides*		CR
Plantae	*Stenocarpus heterophyllus*	EN	
Plantae	*Tristaniopsis polyandra*	EN	
Reptiles	*Graciliscincus shonae*		VU
Reptiles	*Nannoscincus mariei*		VU
Reptiles	*Rhacodactylus ciliatus*		VU
Reptiles	*Rhacodactylus leachianus*		EN
Reptiles	*Rhacodactylus sarasinorum*		EN

Lithologie (1:1 Mio)	% of KBA
Argilites, grès, charbons	**3.68**
Basaltes, dolérites	**0.13**
Cuirasses	**3.16**
Dunites	**33.47**
Fluvio-lacustre	**2.72**
Gabbros cumulats	**3.06**
Granite	**0.88**
Péridotites	**50.40**
Surface-Water*	**2.50**

*interpreted, as Geologie layer has empty records identified as surface water

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**48.34**
Foret Humide	**54.55**
Foret Seche	**0**
Protected Area (FORET DE LA THY, HAUTE POURINA, HAUTE YATE, MONTAGNE DES SOURCES, RIVIERE BLEUE)	**∑ 74.64 --** 2.26; 9.13; 33.19; 11.64; 18.42
Area Capatage d'eaux (HAUTE COULEE, L' OUMBEA, MONTS KOGHIS : RIVIERE OUANEOUE - BRANCHE NORD, RIVIERE DES LACS, ROBINSON : RIVIERE YANNA, THI - BRANCHE EST, THI - BRANCHE OUEST, VALLEE DE DUMBEA)	**59.73**

Landuse - Occupation du Sol (2008/96)	% of KBA
Broussaille	**0.02**
Eau douce	**1.33**
Forêt sur substrat ultramafique	**56.20**
Forêt sur substrat volcano-sédimentaire	**2.15**
Mangrove clairsemée	**0.0001**
Maquis dense paraforestier	**14.90**
Maquis ligno-herbacé	**16.97**
Maquis minier clairsemé	**0.0001**
Maquis minier dense	**0.0035**
Savane	**0.69**
Sol nu sur substrat ultramafique	**0.44**
Sol nu sur substrat volcano-sédimentaire	**0.32**
Tanne	**0.0001**
Végétation arbustive sur substrat volcano-sédimentaire	**1.77**
Végétation dense	**0.05**
Végétation éparse sur substrat ultramafique	**4.58**

Rivière Bleue

Végétation éparse sur substrat volcano-sédimentaire	0.14
Zones d'habitation	0.43

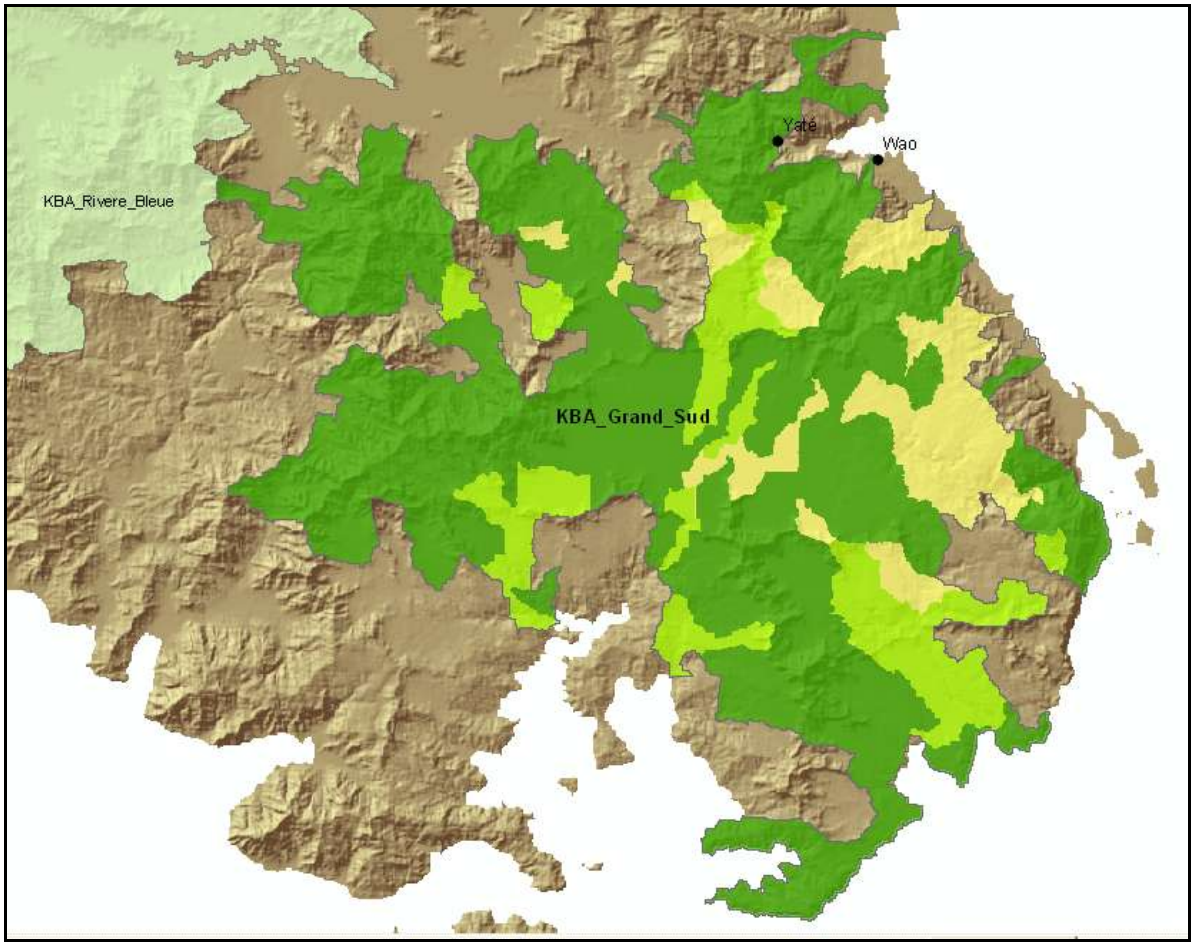
Land Ownership	% of KBA
ETAT FRANCAIS	0.17
NOUVELLE-CALEDONIE	52.77
PROVINCE SUD	42.10
COMMUNE	0.84
PRIVE	3.01
TERRE COUTUMIERE	0.60
NON RENSEIGNEE	0.25

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	0.94	0.94
Travaux de recherche et exploitation	0.46	0.46
Travaux de recherche	2.12	2.18
Pas d'activité minière	4.11	4.67
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	10	

Grand Sud

The southernmost KBA of Grand Terre is called “Grand Sud”, and it covers a total area size of 38,643.46 ha. The KBA is composed of

- CREN areas of 28,474.09 ha size,
- VURRNP areas of 5,591.37 ha size and
- added areas with 4,578.00 ha.



The KBA Grand Sud cover the potential reptile habitat of *Lacertoides pardalis* (proposed VU), *Lioscincus greeri* (RR) and *Bavayia goroensis* (proposed EN). All eight Protected Areas are fully included in the KBA (see listing below), including the very southern fork-shoped one (Cap N'Doua). Four north-eastern added areas are mostly covering humid forest, and including the south-eastern added patch share significant portions of ultramorphic substrate. The central curved sliver-like added area mainly ensures connectivity within the KBA. According to a multi-criteria modelling computation, the KBA Grand Sud shows that 16% KBA area represent predicted habitat sites for endangered plant species of New Caledonia suitable for *Agathis ovata*(proposed EN), *Araucaria muelleri* (proposed EN)*, Araucaria nemorosa* (CR)*, Araucaria rulei* (EN)*, Hibbertia bouletii* (proposed CR)*, Hibbertia favieri* (proposed CR)and *Rauvolfia sevenetii* (proposed CR). Apart from *Hibbertia bouletii*, these plants were recorded within the KBA Grand Sud (see list below). This highlights a

significant potential for biodiversity, where ca. 6,190 ha are available for achieving conservation targets.

Species:

Group	Species	Redlist_Current	RedList_Proposed
Gastropods	Placostylus fibratus	VU	EN
Gastropods	Placostylus porphyrostomus	VU	
Plantae	Agathis lanceolata		VU
Plantae	Agathis moorei	VU	VU
Plantae	Agathis ovata		EN
Plantae	Araucaria bernieri		VU
Plantae	Araucaria biramulata		VU
Plantae	Araucaria muelleri		EN
Plantae	Araucaria nemorosa	CR	CR
Plantae	Araucaria rulei	EN	EN
Plantae	Canarium whitei	CR	
Plantae	Cloezia aquarum		EN
Plantae	Cocconerion minus	VU	
Plantae	Dacrydium guillauminii	CR	CR
Plantae	Hibbertia favieri		CR
Plantae	Kentiopsis pyriformis		CR
Plantae	Kermadecia pronyensis	VU	
Plantae	Leptostylis goroensis	CR	
Plantae	Medicosma leratii		EN
Plantae	Neocallitropsis pancheri	VU	EN
Plantae	Oxera macrocalyx	VU	
Plantae	Pandanus lacuum	EN	
Plantae	Pandanus verecundus	CR	
Plantae	Pittosporum muricatum	EN	
Plantae	Podocarpus beecherae		EN
Plantae	Pritchardiopsis jeanneneyi	CR	
Plantae	Rauvolfia sevenetii		CR
Plantae	Retrophyllum minor	EN	CR
Plantae	Tristaniopsis yateensis	EN	
Plantae	Xylosma capillipes	CR	
Plantae	Xylosma peltatum	CR	
Reptiles	Bavayia goroensis		EN
Reptiles	Graciliscincus shonae		VU
Reptiles	Lacertoides pardalis		VU
Reptiles	Rhacodactylus sarasinorum		VU

Statistical Analysis:

Lithologie (1:1 Mio)	% of KBA
Calcaire corallien	**0.67**
Cuirasses	**31.63**
Dunites	**8.03**
Fluvio-lacustre	**11.52**
Gabbros cumulats	**0.51**
Péridotites	**46.17**
Surface-Water*	**1.33**

*interpreted, as Geologie layer has empty records identified as surface water

Ecology/Environmental Overlap	% of KBA
Ultramorphic Soil	**46.17**
Foret Humide	**21.11**
Protected Area (CAP N'DOUA, CHUTES DE LA MADELEINE, FAUSSE YATE, FORET CACHEE, FORET NORD, GRAND LAC (OUGONE), PIC DU PIN, YATE)	**∑ 12.37** 2.03, 1.02, 1.0, 1.59, 0.70, 0.79, 3.83, 1.40
Area Capatage d'eaux (GORO, RIVIERE DES LACS, TRIBU DE GORO : CREEK OUENDIANA, TRIBU DE TOUAOUROU, WAHO : CREEK NICHOLAS)	**37.69**

Landuse - Occupation du Sol (2008/96)	% of KBA
Eau douce	**2.00**
Eau marine	**0.002**
Forêt sur substrat ultramafique	**28.58**
Forêt sur substrat volcano-sédimentaire	**0.50**
Mangrove clairsemée	**0.01**
Mangrove dense	**0.01**
Maquis dense paraforestier	**35.33**
Maquis ligno-herbacé	**25.25**
Maquis minier clairsemé	**0.02**
Maquis minier dense	**0.12**
Nuages	**0.002**
Savane	**0.26**
Sol nu	**0.02**
Sol nu de mangrove	**0.001**
Sol nu sur substrat ultramafique	**1.87**
Sol nu sur substrat volcano-sédimentaire	**0.40**
Tanne	**0.004**
Végétation arbustive sur substrat volcano-sédimentaire	**0.94**
Végétation dense	**0.27**

Grand Sud

Végétation éparse sur substrat ultramafique	3.96
Végétation éparse sur substrat volcano-sédimentaire	0.01
Zones d'habitation	0.08

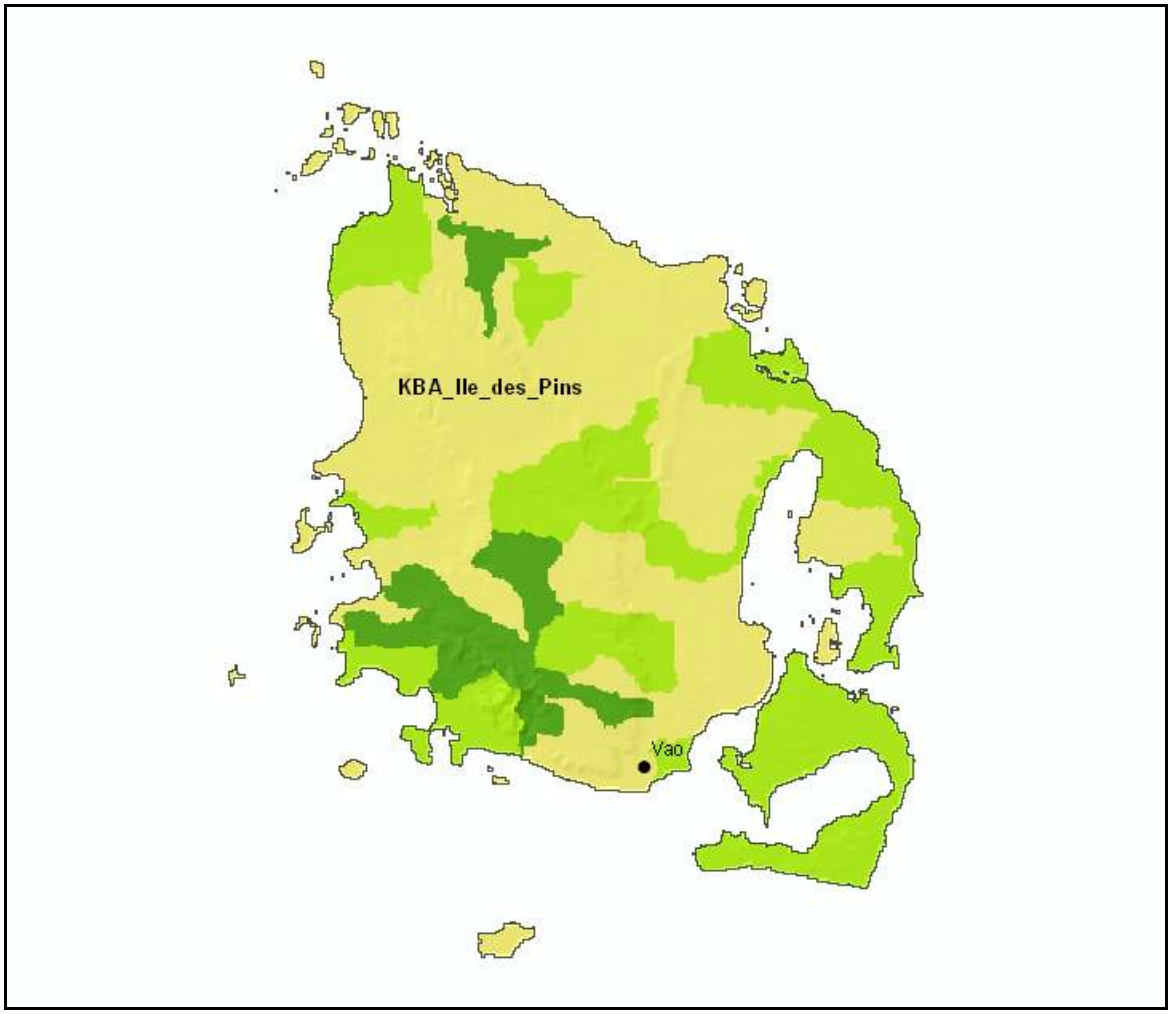
Land Ownership	% of KBA
ETAT FRANCAIS	0.002
NOUVELLE-CALEDONIE	89.86
PROVINCE SUD	6.49
COMMUNE	0.02
PRIVE	1.18
TERRE COUTUMIERE	1.32
NON RENSEIGNEE	0.06

Threats	% of KBA 2010	% of KBA 2011
Mining (as of 2010/11)		
Exploitation	1.16	1.16
Travaux de recherche et exploitation	4.63	4.62
Travaux de recherche	28.69	28.69
Pas d'activité minière	12.16	14.72
Fire Events/ Occurrence		
Year span 2000 – 2010 (remotely detected)	20	

Ile des Pins

The KBA Ile des Pins covers the whole island territory of Ile des Pins (and its town Vao), is part of Province Sud and has an area size of 15,945.37 ha. The KBA is composed of

- CREN 1,550.76 ha,
- VURRNP 5,650.87 ha and
- added areas 8,743.17 ha.



The KBA is covered up to 60% with humid forest, mainly in the periphrial areas to the coast, and especiallt to in the west and south (including the southern islands). The KBA also covers the only protected water water reservoir of Ile des Pins (Kuto et Vao : Creek Galilee et Soucres de la Wouintureu). At the coast in the south west, the plant *Meryta sonchifolia* (VU) has been observed, being the only confirmed site where this plant has been recorded in New Caledonia.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus fibratus*	VU	EN
Gastropods	*Placostylus porphyrostomus*	VU	
Plantae	*Acropogon bullatus*	VU	
Plantae	*Baloghia pininsularis*	EN	
Plantae	*Bocquillonia arborea*	EN	
Plantae	*Callitris sulcata*	EN	EN
Plantae	*Cyclophyllum tenuipes*	VU	
Plantae	*Justicia pinensis*		EN
Plantae	*Melodinus insulaepinorum*		EN
Plantae	*Meryta sonchifolia*	VU	
Plantae	*Neocallitropsis pancheri*	VU	EN
Plantae	*Pouteria brevipedicellata*	EN	
Plantae	*Sarcomelicope glauca*	CR	
Plantae	*Serianthes germainii*		EN
Plantae	*Xylosma pininsulare*	CR	
Reptiles	*Rhacodactylus ciliatus*		VU
Reptiles	*Rhacodactylus leachianus*		EN

Statistical Analysis:

Lithologie (1:1 Mio)	% of KBA
Calcaire corallien	**69.48**
Cuirasses	**18.15**
Dunites	**9.81**
Gabbros cumulats	**0.97**

Ecology/Environmental Overlap	% of KBA
Foret Humide	**58.31**
Foret Seche	**0**
Area Capatage d'eaux (KUTO ET VAO : CREEK GALILEE ET SOUCRES DE LA WOUINTUREU, KUTO PPR, PPE de OUATCHIA DEGOTCHE TOUET)	**7.24**

Landuse - Occupation du Sol (2008/96)	% of KBA
Eau	**0.0046**
Eau douce	**0.37**
Forêt sur substrat ultramafique	**5.38**

Forêt sur substrat volcano-sédimentaire	59.24
Mangrove clairsemée	0.01
Mangrove dense	0.48
Maquis dense paraforestier	11.70
Maquis ligno-herbacé	9.71
Savane	5.73
Sol nu	0.0007
Sol nu de mangrove	0.0003
Sol nu sur substrat ultramafique	0.58
Sol nu sur substrat volcano-sédimentaire	0.45
Végétation arbustive sur substrat volcano-sédimentaire	4.31
Végétation éparse sur substrat ultramafique	0.67
Végétation éparse sur substrat volcano-sédimentaire	0.50
Zones d'habitation	0.87

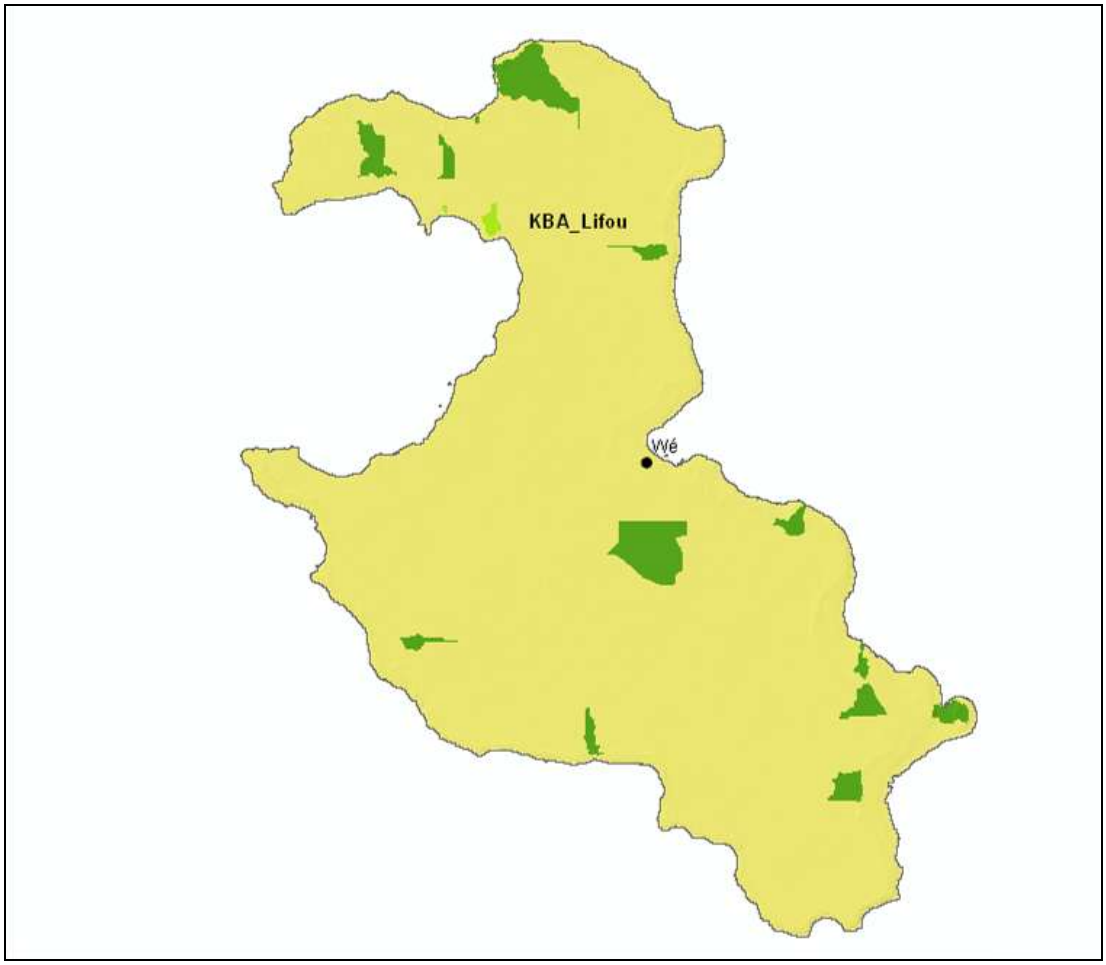
Land Ownership	% of KBA
ETAT FRANCAIS	0.04
NOUVELLE-CALEDONIE	0.01
PROVINCE SUD	7.63
COMMUNE	0.003
PRIVE	0.75
TERRE COUTUMIERE	88.78
NON RENSEIGNEE	0.75

Threats	% of KBA
No Mining records (as of 2010)	–
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	14

Lifou

The KBA Lifou, situated north of the town Wé, is part of the Province des Iles Loyauté and has a total area size of 113,754.90 ha, consisting of

- CREN 4,963.00 ha,
- VURRNP 164.29 ha and
- added areas 108,627.61 ha.



The IBA Lifou covers the northern half of the island Lifou, and is part of the KBA. Most of the KBA delineation includes added areas based on the high density of primary humid forest. Most of the KBA is covered by humid forest (94%). Three sites of *Miniopterus robustior* (EN) are triggering CREN areas, and the palm tree species *Cyphophoenix nucele* (CR) which is endemic to Lifou Island and of very high conservation relevance.

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus fibratus*	VU	EN
Mammals	*Miniopterus robustior*	EN	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Acropogon veillonii*	EN	
Plantae	*Cyphophoenix nucele*	CR	
Plantae	*Tephrosia leratiana*		EN

Lithologie (1:1 Mio)	% of KBA
Calcaire corallien	**65.24**
Calcaires à rhodolites	**34.48**

Ecology/Environmental Overlap	% of KBA
Foret Humide	**91.81**

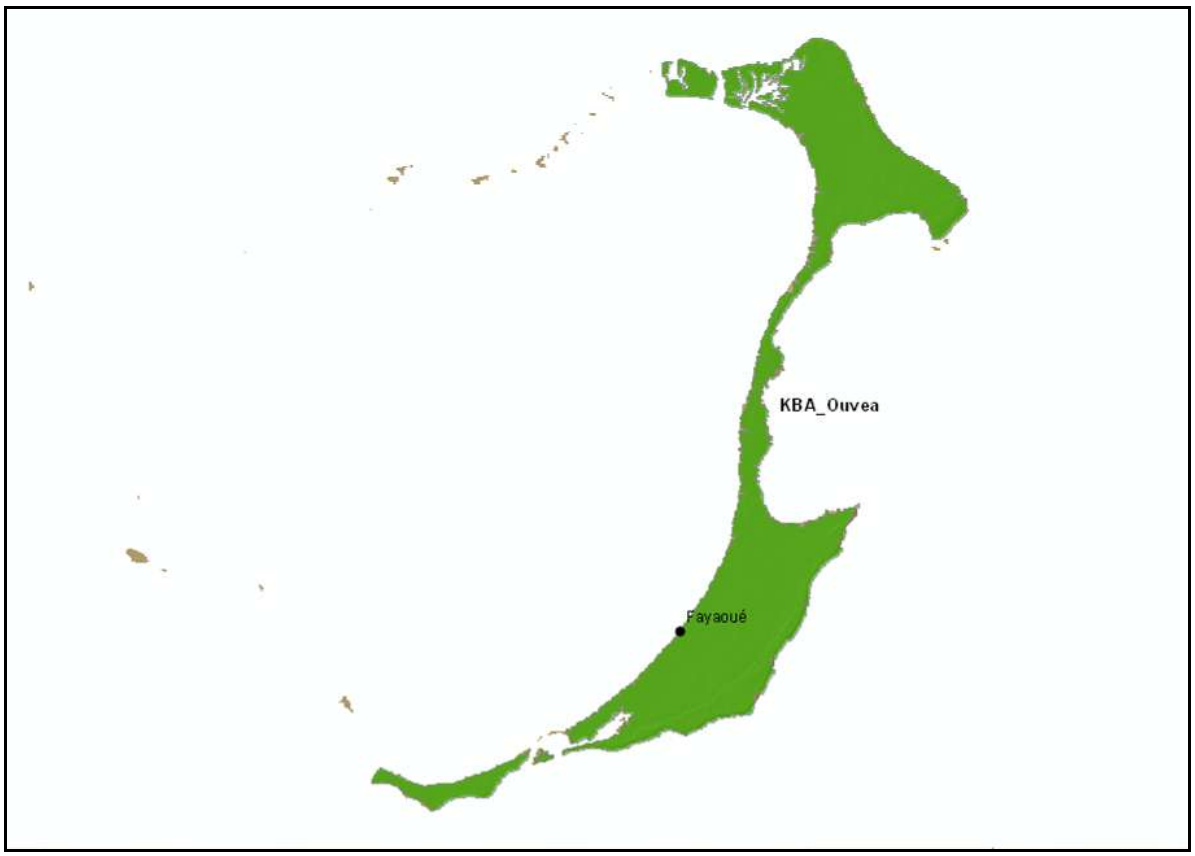
Landuse - Occupation du Sol (2008/96)	% of KBA
Forêt sur substrat volcano-sédimentaire	**92.12**
Savane	**0.83**
Sol nu sur substrat volcano-sédimentaire	**0.13**
Végétation arbustive sur substrat volcano-sédimentaire	**4.08**
Végétation éparse sur substrat volcano-sédimentaire	**0.07**
Zones d'habitation	**1.40**
Zones sombres (non interprétables)	**0.44**

Landownership information was not available.

Threats	% of KBA
No Mining records (as of 2010)	**–**
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	**3**

Ouvéa

The KBA Ouvéa, in Province des Iles Loyauté, has an area size of 13417.33 ha, and follows the delineation of the IBA Ouvéa. Fragment Islets west of it are not part of the KBA. All KBA area is CREN, there are no sites assigned as VURRNP only, neither added areas.



The KBA has a large percentage of himud forest cover (71%). Main CREN trigger is the Bird Uvea Parakeet, *Eunymphicus uvaeensis* (EN).

Species:

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Eunymphicus uvaeensis*	EN	
Gastropods	*Placostylus fibratus*	VU	EN

Statistical Assessment:

Lithologie (1:1 Mio)	% of KBA
Calcaire corallien	**98.51**

Ecology/Environmental Overlap	% of KBA
Foret Humide	71.25
Foret Seche	0

Landuse - Occupation du Sol (2008/96)	% of KBA
Eau douce	0.14
Eau marine	0.02
Forêt sur substrat volcano-sédimentaire	75.23
Mangrove clairsemée	0.11
Mangrove dense	0.23
Nuages	0.37
Savane	0.25
Sol nu sur substrat volcano-sédimentaire	0.27
Végétation arbustive sur substrat volcano-sédimentaire	20.67
Zones d'habitation	1.72
Zones sombres (non interprétables)	0.97

Landownership information was not available.

Threats	% of KBA
No Mining records (as of 2010)	–
Fire Events/ Occurrence	
Year span 2000 – 2010 (remotely detected)	1

ANNEX

Annex I – List of Species - Confirmed KBAs

List of threatened species within confirmed KBAs is shown below.

Group	*Species*	Redlist_Current	RedList_Proposed
Birds	*Eunymphicus uvaeensis*	EN	
Birds	*Gymnomyza aubryana*	CR	
Birds	*Rhynochetos jubatus*	EN	
Gastropods	*Placostylus bondeensis*		CR
Gastropods	*Placostylus caledonicus*		CR
Gastropods	*Placostylus eddystonensis*	VU	CR
Gastropods	*Placostylus fibratus*	VU	EN
Mammals	*Miniopterus robustior*	EN	
Mammals	*Nyctophilus nebulosus*	CR	
Plantae	*Acropogon bosseri*		EN
Plantae	*Acropogon chalopiniae*		CR
Plantae	*Acropogon jaffrei*		EN
Plantae	*Acropogon margaretae*		CR
Plantae	*Acropogon merytifolius*		CR
Plantae	*Acropogon veillonii*	EN	
Plantae	*Agathis ovata*		EN
Plantae	*Ancistrachne numaeensis*	EN	EN
Plantae	*Araucaria humboldtensis*		EN
Plantae	*Araucaria luxurians*	EN	EN
Plantae	*Araucaria muelleri*		EN
Plantae	*Araucaria nemorosa*	CR	CR
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Araucaria scopulorum*	EN	EN
Plantae	*Baloghia pininsularis*	EN	
Plantae	*Beauprea congesta*	EN	
Plantae	*Beauprea penariensis*		EN
Plantae	*Bikkia kaalaensis*	EN	
Plantae	*Bikkia lenormandii*	EN	
Plantae	*Bocquillonia arborea*	EN	
Plantae	*Bocquillonia castaneifolia*	EN	
Plantae	*Bocquillonia longipes*	EN	
Plantae	*Callitris sulcata*	EN	EN
Plantae	*Canacomyrica monticola*	EN	
Plantae	*Canarium whitei*	CR	
Plantae	*Captaincookia margaretae*	CR	
Plantae	*Casearia kaalaensis*	EN	
Plantae	*Cassia artensis*	EN	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Cassine brachycremastra*		EN
Plantae	*Celtis hypoleuca*	EN	
Plantae	*Cerberiopsis neriifolia*	EN	
Plantae	*Cloezia aquarum*		EN
Plantae	*Codiaeum oligogynum*		EN
Plantae	*Croton cordatulus*	EN	
Plantae	*Cupaniopsis rosea*	EN	
Plantae	*Cupaniopsis squamosa*	EN	
Plantae	*Cupaniopsis subfalcata*	EN	
Plantae	*Cupaniopsis tontoutensis*	EN	
Plantae	*Cyphophoenix nucele*	CR	
Plantae	*Dacrydium guillauminii*	CR	CR
Plantae	*Deltaria brachyblastophora*		CR
Plantae	*Dendrobium munificum*		CR
Plantae	*Diospyros erudita*		EN
Plantae	*Dracophyllum alticola*		EN
Plantae	*Dysoxylum pachypodum*	CR	
Plantae	*Elaeocarpus kaalensis*		EN
Plantae	*Gmelina lignum-vitreum*	CR	
Plantae	*Hemigraphis neocaledonica*		EN
Plantae	*Hibbertia favieri*		CR
Plantae	*Hibbertia margaretae*		CR
Plantae	*Hibbertia rubescens*		CR
Plantae	*Homalium betulifolium*	EN	
Plantae	*Homalium juxtapositum*	EN	
Plantae	*Homalium mathieuanum*	EN	
Plantae	*Homalium polystachyum*	EN	
Plantae	*Homalium rubrocostatum*	EN	
Plantae	*Hunga cordata*	EN	
Plantae	*Iteiluma pinifolium*		EN
Plantae	*Justicia pinensis*	EN	EN
Plantae	*Kentiopsis oliviformis*	EN	
Plantae	*Kentiopsis pyriformis*		CR
Plantae	*Lasiochlamys hurlimannii*	EN	
Plantae	*Lavoixia macrocarpa*	CR	
Plantae	*Leptostylis goroensis*	CR	
Plantae	*Libocedrus chevalieri*	EN	CR
Plantae	*Libocedrus yateensis*	VU	EN
Plantae	*Litsea imbricata*	EN	
Plantae	*Litsea stenophylla*		EN
Plantae	*Logania imbricata*		EN

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Macadamia angustifolia*		EN
Plantae	*Medicosma articulata*		EN
Plantae	*Medicosma congesta*		EN
Plantae	*Medicosma exigua*		EN
Plantae	*Medicosma gracilis*		EN
Plantae	*Medicosma leratii*		EN
Plantae	*Medicosma petiolaris*		EN
Plantae	*Medicosma suberosa*		EN
Plantae	*Medicosma subsessilis*		EN
Plantae	*Medicosma tahafeana*		EN
Plantae	*Megastylis latissima*		EN
Plantae	*Megastylis paradoxa*		EN
Plantae	*Melodinus insulaepinorum*		EN
Plantae	*Metrosideros tetrasticha*		EN
Plantae	*Myricanthe discolor*		EN
Plantae	*Neisosperma sevenetii*	EN	
Plantae	*Neisosperma thiollierei*	CR	
Plantae	*Neocallitropsis pancheri*	VU	EN
Plantae	*Oryza neocaledonica*	EN	EN
Plantae	*Oxanthera neocaledonica*	EN	
Plantae	*Oxanthera undulata*	CR	
Plantae	*Pandanus lacuum*	EN	
Plantae	*Pandanus verecundus*	CR	
Plantae	*Phyllanthus baraouaensis*		EN
Plantae	*Phyllanthus fractiflexus*		EN
Plantae	*Phyllanthus jaubertii*		CR
Plantae	*Phyllanthus mcphersonii*		EN
Plantae	*Phyllanthus paucitepalus*		EN
Plantae	*Phyllanthus petchikaraensis*		EN
Plantae	*Phyllanthus pindaiensis*	CR	CR
Plantae	*Phyllanthus stenophyllus*		EN
Plantae	*Phyllanthus unifoliatus*	EN	CR
Plantae	*Pittosporum aliferum*	EN	
Plantae	*Pittosporum brevispinum*	EN	
Plantae	*Pittosporum muricatum*	EN	
Plantae	*Pittosporum ornatum*	EN	
Plantae	*Planchonella contermina*		EN
Plantae	*Planchonella kaalaensis*		EN
Plantae	*Planchonella koumaciensis*		EN
Plantae	*Podocarpus beecherae*		EN
Plantae	*Podocarpus decumbens*	VU	CR

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Podocarpus longefoliolatus*		EN
Plantae	*Podocarpus polyspermus*	VU	EN
Plantae	*Pouteria brevipedicellata*	EN	
Plantae	*Pouteria danikeri*	EN	
Plantae	*Pouteria pinifolia*	EN	
Plantae	*Pritchardiopsis jeanneneyi*	CR	
Plantae	*Rauvolfia sevenetii*		CR
Plantae	*Retrophyllum minor*	EN	CR
Plantae	*Sarcomelicope glauca*	CR	
Plantae	*Scaevola macropyrena*		EN
Plantae	*Schefflera veitchii*	EN	
Plantae	*Semecarpus riparia*	EN	
Plantae	*Serianthes germainii*		EN
Plantae	*Solanum hugonis*	EN	EN
Plantae	*Solanum pseuderanthemoides*		CR
Plantae	*Stenocarpus heterophyllus*	EN	
Plantae	*Stenocarpus villosus*	CR	
Plantae	*Styphelia violaceospicata*		EN
Plantae	*Tephrosia leratiana*		EN
Plantae	*Tristaniopsis polyandra*	EN	
Plantae	*Tristaniopsis yateensis*	EN	
Plantae	*Vitex evoluta*	EN	
Plantae	*Xanthostemon francii*		EN
Plantae	*Xanthostemon longipes*		EN
Plantae	*Xylosma capillipes*	CR	
Plantae	*Xylosma grossecrenatum*	EN	
Plantae	*Xylosma inaequinervium*	EN	
Plantae	*Xylosma peltatum*	CR	
Plantae	*Xylosma pininsulare*	CR	
Plantae	*Zygogynum oligostigma*	EN	
Reptiles	*Bavayia exsuccida*		EN
Reptiles	*Bavayia goroensis*		EN
Reptiles	*Bavayia ornata*		EN
Reptiles	*Caledoniscincus chazeaui*		EN
Reptiles	*Caledoniscincus orestes*		EN
Reptiles	*Celatiscincus similis*		EN
Reptiles	*Dierogekko inexpectatus*		CR
Reptiles	*Dierogekko kaalaensis*		CR
Reptiles	*Dierogekko koniambo*		CR
Reptiles	*Dierogekko nehoueensis*		CR
Reptiles	*Dierogekko poumensis*		CR

Group	*Species*	Redlist_Current	RedList_Proposed
Reptiles	*Dierogekko thomaswhitei*		CR
Reptiles	*Dierogekko validiclavis*		EN
Reptiles	*Eurydactylodes symmetricus*		EN
Reptiles	*Kanakysaurus viviparus*		EN
Reptiles	*Kanakysaurus zebratus*		EN
Reptiles	*Lioscincus maruia*		EN
Reptiles	*Lioscincus steindachneri*		EN
Reptiles	*Lioscincus vivae*		CR
Reptiles	*Marmorosphax kaala*		CR
Reptiles	*Marmorosphax taom*		CR
Reptiles	*Nannoscincus exos*		CR
Reptiles	*Nannoscincus hanchisteus*		CR
Reptiles	*Nannoscincus humectus*		EN
Reptiles	*Nannoscincus manautei*		CR
Reptiles	*Oedodera marmorata*		CR

Annex II - List of VU Species in confirmed KBAs

Group	*Species*	Redlist_Current	RedList_Proposed
Gastropods	*Placostylus porphyrostomus*	VU	
Mammals	*Notopteris neocaledonica*	VU	
Mammals	*Pteropus vetulus*	VU	
Plantae	*Acropogon aoupiniensis*	VU	
Plantae	*Acropogon domatifer*	VU	
Plantae	*Agathis corbassonii*	VU	
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis moorei*	VU	VU
Plantae	*Albizia guillainii*	VU	
Plantae	*Alloschmidia glabrata*	VU	
Plantae	*Araucaria bernieri*		VU
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria montana*		VU
Plantae	*Araucaria schmidii*	VU	
Plantae	*Archidendropsis paivana*	VU	
Plantae	*Austrobuxus cracens*	VU	
Plantae	*Basselinia favieri*	VU	
Plantae	*Basselinia iterata*	VU	
Plantae	*Basselinia tomentosa*	VU	
Plantae	*Basselinia vestita*	VU	
Plantae	*Cleidion lochmios*	VU	
Plantae	*Cleidion marginatum*	VU	
Plantae	*Cleidion veillonii*	VU	
Plantae	*Cocconerion minus*	VU	
Plantae	*Cunonia aoupiniensis*	VU	
Plantae	*Cyclophyllum tenuipes*	VU	
Plantae	*Diospyros fastidiosa*	VU	
Plantae	*Diospyros margaretae*	VU	
Plantae	*Diospyros nebulosa*	VU	
Plantae	*Diospyros perplexa*	VU	
Plantae	*Diospyros pustulata*	VU	
Plantae	*Diospyros trisulca*	VU	
Plantae	*Elaeocarpus colnettianus*	VU	
Plantae	*Elaeocarpus moratii*	VU	
Plantae	*Euroschinus jaffrei*	VU	
Plantae	*Kermadecia pronyensis*	VU	
Plantae	*Leptostylis petiolata*	VU	
Plantae	*Meryta sonchifolia*	VU	

Group	*Species*	Redlist_Current	RedList_Proposed
Plantae	*Metrosideros punctata*	VU	
Plantae	*Neisosperma brevituba*	VU	
Plantae	*Nothofagus discoidea*	VU	
Plantae	*Oxera macrocalyx*	VU	
Plantae	*Pandanus decastigma*	VU	
Plantae	*Parasitaxus usta*		VU
Plantae	*Pittosporum collinum*	VU	
Plantae	*Pittosporum gatopense*	VU	
Plantae	*Pittosporum paniense*	VU	
Plantae	*Pycnandra kaalaensis*	VU	
Plantae	*Sloanea lepida*	VU	
Plantae	*Sloanea suaveolens*	VU	
Reptiles	*Graciliscincus shonae*		VU
Reptiles	*Lacertoides pardalis*		VU
Reptiles	*Marmorosphax boulinda*		VU
Reptiles	*Nannoscincus gracilis*		VU
Reptiles	*Nannoscincus mariei*		VU
Reptiles	*Nannoscincus rankini*		VU
Reptiles	*Rhacodactylus chahoua*		VU
Reptiles	*Rhacodactylus ciliatus*		VU
Reptiles	*Rhacodactylus sarasinorum*		VU
Reptiles	*Tropidoscincus aubrianus*		VU

Annex III - Endangered Species in Candidate KBAs

Candidate KBAs

Group	*Species*	RedList_Current	RedList_Proposed
Gastropods	*Placostylus bondeensis*		CR
Gastropods	*Placostylus caledonicus*		CR
Gastropods	*Placostylus eddystonensis*	VU	CR
Gastropods	*Placostylus fibratus*	VU	EN
Gastropods	*Placostylus porphyrostomus*	VU	
Gastropods	*Placostylus scarabus*		CR
Mammals	*Miniopterus robustior*	EN	
Plantae	*Acropogon jaffrei*		EN
Plantae	*Acropogon veillonii*	EN	
Plantae	*Agathis lanceolata*		VU
Plantae	*Agathis moorei*	VU	VU
Plantae	*Agathis ovata*		EN
Plantae	*Albizia guillainii*	VU	
Plantae	*Alphandia resinosa*		EN
Plantae	*Ancistrachne numaeensis*	EN	EN
Plantae	*Araucaria biramulata*		VU
Plantae	*Araucaria humboldtensis*		EN
Plantae	*Araucaria luxurians*	EN	EN
Plantae	*Araucaria muelleri*		EN
Plantae	*Araucaria rulei*	EN	EN
Plantae	*Araucaria scopulorum*	EN	EN
Plantae	*Bocquillonia castaneifolia*	EN	
Plantae	*Callitris sulcata*	EN	EN
Plantae	*Canacomyrica monticola*	EN	
Plantae	*Canarium whitei*	CR	
Plantae	*Canavalia favieri*	CR	CR
Plantae	*Canavalia veillonii*	CR	
Plantae	*Captaincookia margaretae*	CR	
Plantae	*Cassine brachycremastra*		EN
Plantae	*Cleidion lochmios*	VU	
Plantae	*Cloezia aquarum*		EN
Plantae	*Codiaeum oligogynum*		EN
Plantae	*Cupaniopsis mouana*	EN	
Plantae	*Cyrtandra mareensis*		EN
Plantae	*Dendrobium munificum*		CR

Group	*Species*	RedList_Current	RedList_Proposed
Plantae	*Diospyros neglecta*		EN
Plantae	*Diospyros pustulata*	VU	
Plantae	*Diospyros veillonii*	CR	
Plantae	*Dysoxylum pachypodum*	CR	
Plantae	*Eugenia noumeensis*	VU	
Plantae	*Homalium betulifolium*	EN	
Plantae	*Homalium buxifolium*	EN	
Plantae	*Homalium mathieuanum*	EN	
Plantae	*Hunga mackeeana*	VU	
Plantae	*Jasminum noumeense*	VU	EN
Plantae	*Justicia pinensis*	EN	EN
Plantae	*Leptostylis gatopensis*	EN	
Plantae	*Medicosma latifolia*		EN
Plantae	*Medicosma leratii*		EN
Plantae	*Megastylis latissima*		EN
Plantae	*Melodinus insulaepinorum*		EN
Plantae	*Myricanthe discolor*		EN
Plantae	*Neocallitropsis pancheri*	VU	EN
Plantae	*Ochrosia inventorum*	CR	CR
Plantae	*Oxanthera fragrans*	EN	
Plantae	*Phyllanthus conjugatus*	EN	
Plantae	*Phyllanthus golonensis*		EN
Plantae	*Phyllanthus natoensis*		EN
Plantae	*Phyllanthus pinjenensis*		EN
Plantae	*Phyllanthus rozennae*		EN
Plantae	*Phyllanthus unifoliatus*	EN	CR
Plantae	*Phyllanthus veillonii*		EN
Plantae	*Pittosporum artense*	VU	
Plantae	*Pittosporum collinum*	VU	
Plantae	*Pittosporum muricatum*	EN	
Plantae	*Pittosporum tanianum*	CR	
Plantae	*Planchonella contermina*		EN
Plantae	*Podocarpus beecherae*		EN
Plantae	*Podocarpus longefoliolatus*		EN
Plantae	*Schefflera veitchii*	EN	
Plantae	*Semecarpus riparia*	EN	
Plantae	*Solanum hugonis*	EN	EN
Plantae	*Stenocarpus heterophyllus*	EN	
Plantae	*Tephrosia leratiana*		EN
Plantae	*Terminalia cherrieri*	EN	
Plantae	*Trigonostemon cherrieri*	CR	

Group	*Species*	RedList_Current	RedList_Proposed
Plantae	*Tristaniopsis polyandra*	EN	
Plantae	*Xanthostemon glaucus*	CR	
Plantae	*Xanthostemon lateriflorus*		EN
Plantae	*Xanthostemon longipes*		EN
Plantae	*Zygogynum oligostigma*	EN	
Reptiles	*Caledoniscincus auratus*		EN
Reptiles	*Dierogekko koniambo*		CR
Reptiles	*Dierogekko nehoueensis*		CR
Reptiles	*Dierogekko poumensis*		CR
Reptiles	*Eurydactylodes occidentalis*		CR
Reptiles	*Kanakysaurus viviparus*		EN
Reptiles	*Rhacodactylus chahoua*		VU

Annex IV - List of CREN Species within the Candidate KBAs that are not in confirmed KBAs

Group	*Species*	RedList_Currernt	RedList_Proposed
Gastropods	*Placostylus scarabus*		CR
Plantae	*Alphandia resinosa*		EN
Plantae	*Canavalia favieri*	CR	CR
Plantae	*Canavalia veillonii*	CR	
Plantae	*Cupaniopsis mouana*	EN	
Plantae	*Cyrtandra mareensis*		EN
Plantae	*Diospyros neglecta*		EN
Plantae	*Diospyros veillonii*	CR	
Plantae	*Homalium buxifolium*	EN	
Plantae	*Jasminum noumeense*	VU	EN
Plantae	*Leptostylis gatopensis*	EN	
Plantae	*Medicosma latifolia*		EN
Plantae	*Ochrosia inventorum*	CR	CR
Plantae	*Oxanthera fragrans*	EN	
Plantae	*Phyllanthus conjugatus*	EN	
Plantae	*Phyllanthus golonensis*		EN
Plantae	*Phyllanthus natoensis*		EN
Plantae	*Phyllanthus pinjenensis*		EN
Plantae	*Phyllanthus rozennae*		EN
Plantae	*Phyllanthus veillonii*		EN
Plantae	*Pittosporum tanianum*	CR	
Plantae	*Terminalia cherrieri*	EN	
Plantae	*Trigonostemon cherrieri*	CR	
Plantae	*Xanthostemon glaucus*	CR	
Plantae	*Xanthostemon lateriflorus*		EN
Reptiles	*Caledoniscincus auratus*		EN
Reptiles	*Eurydactylodes occidentalis*		CR

Annex V- List of VURRNP species not in Confirmed KBAs

Group	*Species*	RedList_Current	RedList_Proposed	RR
Plantae	*Cyphophoenix elegans*	VU		RR
Plantae	*Diospyros impolita*	VU		RR
Plantae	*Dutaillyea amosensis*	VU		RR
Plantae	*Eugenia noumeensis*	VU		RR
Plantae	*Hunga mackeeana*	VU		RR
Plantae	*Ochrosia grandiflora*	VU		RR
Plantae	*Pittosporum artense*	VU		RR
Plantae	*Tristaniopsis vieillardii*	VU		RR

Annex VI - List VURRNP species not covered by CREN sites

Group	*Species*	RedList_Currernt	RedList_Proposed	RR
Fish	*Cestraeus oxyrhynchus*			
Fish	*Cestraeus plicatilis*			
Plantae	*Cyphophoenix elegans*	VU		RR
Plantae	*Diospyros impolita*	VU		RR
Plantae	*Diospyros trisulca*	VU		RR
Plantae	*Dutaillyea amosensis*	VU		RR
Plantae	*Eugenia ericoides*			RR
Plantae	*Meryta sonchifolia*	VU		RR
Plantae	*Ochrosia grandiflora*	VU		RR
Plantae	*Pandanus decastigma*	VU		RR
Plantae	*Tristaniopsis vieillardii*	VU		RR

ANNEX VII - Utilised Data

Data	Type	Source	Proprietor
Réserves - naturelle, - de faune, - de flores, - parc provinciaux		DTSI	
Zone Patrimoine Mondial	UNESCO	PN/DTSI	
Géologie: 1:1.000.000, 1:200.000, 1:50.000		PN, DTSI	
Pédologie: 1:200.000 PN		PN	
Pédologie: 1:200.000		DTSI	
MNT : 50m, 10m		DTSI	
MNT 30m	Aster Imagery	Nasa, US	
Bathymetry, 2009	Raster, 30 arc seconds (~ 1000 m)	IBCAO, Uni Stockholm	GEBCO
Précipitation: Raster 1000m		(DTSI)	Météo France
Occupation du Sol 2008, 1996		DTSI	
Evapotranspiration: Raster 1000m		NASA, US	
Réseau hydrographique		DTSI	
Périmètre de protection des eaux, 2011		DTSI	
Surface dégradées		DTSI	
Cadastre Minier 2010		DIMENC	
Bâtiments		PN	
Land Tenure 2010		DITTT	
District de recensement ISEE (2004)	Population data	PN	
Fire onbservation MODIS (2000 – 2010)		Nasa, US	
Foret sèche		DTSI	
Mangrove: Physiographie de mangroves		PN	Zoneco
ZICO (IBA)	Polygones et Points	SCO NC	
Plantes menacées	Points, IUCN & locally proposed status	CI, a la base de GBIF 2010, Musée Paris, NC, et IRD	

Data	Type	Source	Proprietor
Bulimes	Points	Musée Paris/ Atlas	
Limites administratives : Province, Dsitrict		DTSI	
Points d'observation de Reptiles	Points et Polygones	CI/Musée Australie	
Micro/Macro chiroptères	Points	IAC	
Roussettes	Points	PN	
Poisson, crustacees, espèces d'eau douce (2010)	Points, Atlas Poissons	CI/WWF, C. Poellabauer	
Zones de frai PN		PN	
Tortues PN	Points	PN	
Dugong, 2009	Points, Polygon (recommended conservation areas)	ZoNéCo/Opération Cétacés	

References

Bouchet P.H., Jaffré T. and Veillon, J. M. 1995. Plant extinction in New Caledonia: protection of sclerophyll forests urgently needed. Biodiversity and Conservation 4: 415-428.

Conseil économique et social de la Nouvelle Calédonie 2008, Synthèse des Assises de l'eau

Conservation Iinternational/IUCN Workshop, February 2010, Global Reptile Assessment Workshop for New Caledonia, held from 1st to 5th February 2010 in Noumea, NC

DDEE Province Nord, 2009, Code de l'Environment, Editopn 2009, Gourvernement Nouvelle Caledonie

DENV Province Sud, 2009, Code de l'Environment, Editopn 2009, Gourvernement Nouvelle Caledonie

Cowling, R.M., Pressey, R.L., Rouget, M., Lombard, A.T., 2003. A conservation plan for a global biodiversity hotspot – the Cape Floristic Region, South Africa. Biological Conservation 112 (2003), p. 191-216

Duke, N.c., A Brief Account of the Mangroves of New Caledonia, Interim report, 2007, University of Queensland, Brisbane, QLD Australia

Eike Neubert, Corinne Cherl-Mora and Phillipe Bouchet, 2009. Bulimes. Museum National d'Histoire Naturelle, Paris, in: Zoologia Neocaledonica 7, publication scientifique du Museum, 2009

Fabrice M. Brescia, Christine Pöllabauer, Murray A. Potter, Alastair W. Robertson, 2007, A review of the ecology and conservation of Placostylus (Mollusca: Gastropoda: Bulimulidae) in New Caledonia, Molluscan Research 28(2): 111–122

Foret Seche Programme, (2010), http://www.foretseche.nc, accessed on 22nd April 2010.

Gabrié, C., Bouvet, G., Chevillon, C., Cros, A., December 2008. Analyse écorégionale marine de la Nouvelle-Calédonie, 1A1 Stratégie de conservation de la biodiversité marine, CRISP

Giglio, L., MODIS Collection 5 Active Fire Product User's Guide Version 2., 2010, Science Systems and Applications, Inc. University of Maryland, Department of Geography

Gillespie, T.W. and Jaffré, T. 2003. Tropical dry forests of New Caledonia. Biodiversity and Conservation 12: 1687-1697.

Jaffré, T., Munzinger, J., Lowry, P.P., 02/2010. "Threats to the conifer species found on New Caledonia's ultramafic massifs and proposals for urgently needed measures to improve their protection", Biodiversity Conservation, Vol 19, No 5, p. 1485-1502, Springer Verlag

Jerome Spaggiari, 03/2010. Document de travail: “Informations écologiques recueillies sur les espèces de plantes néocalédoniennes considérées comme EN ou CR”, in: Notes sur les espèces cartographiées - draft transmis.pdf

Jerôme Spaggiari, Vivien Chartendrault, Nicols Barré, 03/2007. Zones importantes pour la conservation des oiseaux de Nouvelle-Calédonie, Société calédonienne d’ornithologie, Bird Life International.

Langhammer, P.F., Bakarr,M.I., Bennun, L.A., Brooks, T.M., Clay, R.P., Darwall,W., De Silva, N., Edgar, G.J., Eken, G., Fishpool, L.D.C.,3 Fonseca, G.A.B. da, Foster, M.N., Knox, D.H., Matiku, P., Radford, E.A., Rodrigues, A.S.L., Salaman, P., Sechrest, W., and Tordoff, A.W. (2007). Identification and Gap Analysis of Key Biodiversity Areas: Targets for Comprehensive Protected Area Systems. Gland, Switzerland: IUCN.

Marguels, C. and Sakar, S. (2007). Systematic Conservation Planning, Cambridge University Press, Cambridge

Marquet, G., Keith, P., Vignieux, E., 2003. Atlas des poissons et des crustacés d’eau douce de Nouvelle Calédonie, Patrimoines Naturels, 58.

McKenna S.A., Draft paper for Rapid Marine Biodiversity Assessment No.62 (for eastern Lagoons, New Caledonia), Conservation International

Pöllabauer, Chrstine, 2010, Bureau d’Etudes et de Recherches biologiques, Information des espèce de poisson/qualité des rivières, Noumea.

Pierson E. D. and Rainey W. E.,1992. The biology of flying foxes of the genus Pteropus: a review. Biological report 90 (23). 17 pp

Sanborn and Nicholson, 1950. "Bats from New Caledonia, the Solomons Islands, and New Hebrides." Fieldiana Zoology 31(36): 313-338.

World Heritage Nomination – IUCN Technical Evaluation, 2008. The Lagoons of New Caledonia: Reef Diversity and Associated Ecosystems (France) – ID No. 1115, IUCN Evaluation Report May 2008

ZoNéCo, 2006. Mangrove Atlas, New Caledonia

NEW CALEDONIA ECOSYSTEM PROFILE WORKING GROUP

The New Caledonia Ecosystem Profile Working group, facilitated by the Government of New Caledonia, brings together the three provincial communities, NGOs and the scientific community. It aims to develop tools for decision support to identify priority intervention on remarkable areas and species of terrestrial, marine and freshwater ecosystems.