International Waterbird Census Madagascar

STRENGHNING THE INTERNATIONAL WATERBIRD CENSUS IN THE AFRICAN- EURASIAN FLYWAY

Implementation: October 2013- February 2014

Contract n° 10000461

Technical Report

STRENGHNING THE INTERNATIONAL WATERBIRD CENSUS IN THE AFRICAN- EURASIAN FLYWAY

Period of implementation : Octobre 2013- Février 2014

Contents

STRENGHNING THE INTERNATIONAL WATERBIRD CENSUS IN THE AFRICAN- EURASIAN FLYWAY

Implementation period : Octobre 2013- Février 2014

TECHNICAL REPORT

Report by Rivo RABARISOA

National Coordinator of the IWC Madagascar

Wetlands program Coordinator, Asity Madagascar

Email rivo.rabarisoa@birdlife-mada.org, Phone nb: 261 32 40 068 24

IWC Madagascar

STRENGHNING THE INTERNATIONAL WATERBIRD CENSUS IN THE AFRICAN- EURASIAN FLYWAY

Implementation : October 2013- February 2014

1. BACKGROUND

Madagascar is involved into the International Waterbird Census network since 1993 with strong participation of non-governmental organizations. During this period, data from this census was particularly used to support the nomination of Ramsar site in Madagascar such as the complex des lacs de Manambolomaty (Western Madagascar) , the lac Tsimanapetsotsa (South-western) and also the private site of lac Tsarasaotra Alarobia (Capital city). Because of many reasons as the political situation in the country and lack of participant's mobilization, no activity related to the IWC Madagascar was recorded for a few years. In 2012, the network was strengthening again to support site managers for management of their site and support convention implementation adopted by Malagasy Government such as the African Eurasian Waterbird Agreement and the Ramsar convention.

2. AIMS AND OB JECTIVES

The project aims is to improve the International Waterbirds Census in Madagascar with three objectives:

- Mobilizing institutions partners and observers and improving communication for the IWC Madagascar
- Improving identification and census skills for sites managers and managers
- Improving data management for Madagascar

Expected results and achievement

Table 1: Expected results and achievement for IWC Madagascar

Expected results	Achievement	Period
Improved communication with feedback to observer network	IWC Madagascar report newsletter 2012-2014 produced	March 2014
	Site manager responsible mobilized to involve the waterbird census into their program: 5 institutions mobilized	December 2013 – February 2014
Improved identification and counting skills	Guide for Malagasy threatened species produced	February 2014
	Practical training on waterbird identification and counting for the team of Ankarafantsika PA and lac Tsarasaotra Alarobia counters	January & February 2014
Improved data management	Data of IWC Madagascar recorded on Wetlands International datasheet form	October 2013 – February 2014

	Observado.org adopted to IWC Madagascar and introduced to institutions and observers	February 2014
	5 sites boundary introduced to Observado.org for IWC Madagascar.	December 2013 – February 2014
	The other sites are in process of adaptation into this program	March-April 2014
	Carry on collect of IWC data from partners and observers: data will be involve into the next reporting period newsletter (March 2015)	March 2014

3. ACTIVITIES AND RESULTS

3.1. Improved communication with feedback to observer network

3.1.1. Mobilization of the network members

Institutions and site managers were mobilized to participate into the IWC Madagascar program. Two steps were followed for that:

- ***Introducing the aim, objectives and importance of the IWC to the Government authorities:*** A series of contact and meeting was made with Governmental authorities, the The "Direction Générale du Ministère de l'Environnement et des Forêts" during November and December 2013 with the following objectives; 1) to introduce the IWC Madagascar and its importance for wetlands management, 2) to work through Malagasy governmental authorities to develop the network in Madagascar. The AEWA Madagascar Focal Point, Mme Zarasoa, worked closely with the National Coordinators of IWC Madagascar for the preparation and conduct of this contact. As a result, an official letter was developed and signed by the General Secretary of Environmental and Forest Ministry for the mobilization of institutions and site managers on the IWC in Madagascar (Letter on appendix 1 of this report). Mentioned into this letter, Institutions and wetlands sites managers were invited to participate into the program.
- ***Mobilizing conservation NGO/institution and observers*** for the program: Individual contact followed by email communication exchange was made with IWC potential partners in Madagascar. 11 Institutions was contacted through this program, summarized into the following table with their respective wetlands sites.

Table 2: List of contacted institutions and Site managers for the IWC Madagascar Network

Institutions/Site managers	Welland sites	Responsaibles
Université de Mahajanga	Baie de Bombetoka	Dr Randrianjafy Voahangy
Asity Madagascar	Lac Ihotry & Lac Kinkony	Mme Vony Raminoarisoa, Coordinateur National de ASITY Madagascar

Association Vahatra	Ponctual site	Dr Raherilalao Marie Jeanne & Dr Steeve Goodman
Projet Ambatovy	Site Ramsar de Torotorofotsy	Mme Baholy Ramahavalisoa & Mr Andrianaivomahefa Paul
Projet Bioculturel Antrema	Zone humide NAP Antrema	Pr Roger Edmond
Parc botanique et Zoologique de Tsimbazaza	Parc Tsimbazaza	Mr Julien Rémi Ramanampamonjy
Madagascar National Parks Ankarafantsika	Lac Ravelobe	Mr le Directeur National, MNP Ankarafantsika
Madagascar National Parks Betioky Sud	Lac Tsimanampetsotsa	Mr le Directeur National du Parc National Betioky Sud
Madagascar National Parks Betioky Sud	Baie deBaly wetlands	Mr le Directeur du Parc National de Soalala
Durell Wildlife Conservation Trust	Lac Alaotra et Lac Bedo	Mr Richard Lewis and Mr Felix Razafindrajao
The Peregrine Fund Madagascar	Complexes Manambolomaty et de ses lacs satellites, zones humides de Bealanana et Lac Mandrozo	Dr Lily Réné de Rolland, Directeur National
WWF	Zones humides gérées par WWF	Mr Tiana Ramahaleo et Mr Rafanomezantsoa Simon
Association des chasseurs	Site Ramsar de Tsarasaotra Alarobia	Mme Sonjia Ranarivelo
Quit Minerals Madagascar	Lanirano et Ambavarano /Lagune de la région d'Anosy	Mr Ramanamanjato Jean Baptiste et Mr Andriamandimbiarisoa Laza

3.1.2. Producing annual newsletter and report

Annual report was produced concerning the result of the IWC Madagascar from the years 2010 to 2014. The objective of the this newsletter are: 1) to give feedback to counters and NGO partners , 2) to motivate them to carry on the census periodically (January & July each year), and 3) motivate and mobilize other partners to be part of the network . This newsletter is shared to all partners' especially governmental decision-makers.

The newsletter includes the following subject:

- An introduction of the IWC: aim and objectives
- History of the waterbird census in Madagascar and its importance
- Summary of the visited site from January 2010 to February 2014
- Summary of recorded waterbird from this period and other punctual observation shared by observers
- List of participants and acknowledgment

3.2. *Improved identification and counting skills*

3.2.1. Refreshing courses for site managers

The objective of this activity is to give support to the site managers and observers on waterbird coordination and census at their site. Two refreshing courses were conducted in January and February 2014 at two IWC sites in Madagascar:

- ***Lac Ravelobe at Ankarafantsika National Park on February 24th -25th.*** : The course was composed by at first part a theorical training for bird identification and counting technics and in a second part a practical training at the lac Ravelobe. This site is inside the Ankarafantsika Protected Area, managed by the Madagascar National Parks part of the IWC Madagascar site since 1999. Lac Ravelobe serve as nesting and roosting area for heron colonies including a nesting site for the Madagascar Pond Heron *Ardeola idea* and some other species as the Madagascar Fish Eagle *Haliaeetus vociferoides* and the Madagascar Heron *Ardea humbloti*. 11 participants was attended the course, composed by the site manager (PA ecological monitoring manager), 7 MNP Agents and 2 representing of local community leaders and 1 tourist guide (List of participant attached on annex 5). The result of the count was involved into the IWC data from.

Photo 1 : Refreshing course at Ankarafantsika for Madagascar National Parks Agents (Photo: Rivo Rabarisoa)

Photo 2 : Heron nesting site at lac Ravelobe (Photo Rivo Rabarisoa)

- ***Lac Tsarasaotra Alarobia, a private Ramsar site***: The training was conducted on 30th January for the IWC participants and the site Managers. Eight participants were present during the practical training courses on counting technique. The result of this observation was involved into the IWC Madagascar data form. Lac Tsarasaotra Alarobia is one of the important nesting areas for heron in the Capital city of Antananarivo. Four pairs of Madagascar pond heron was seen during this visit.

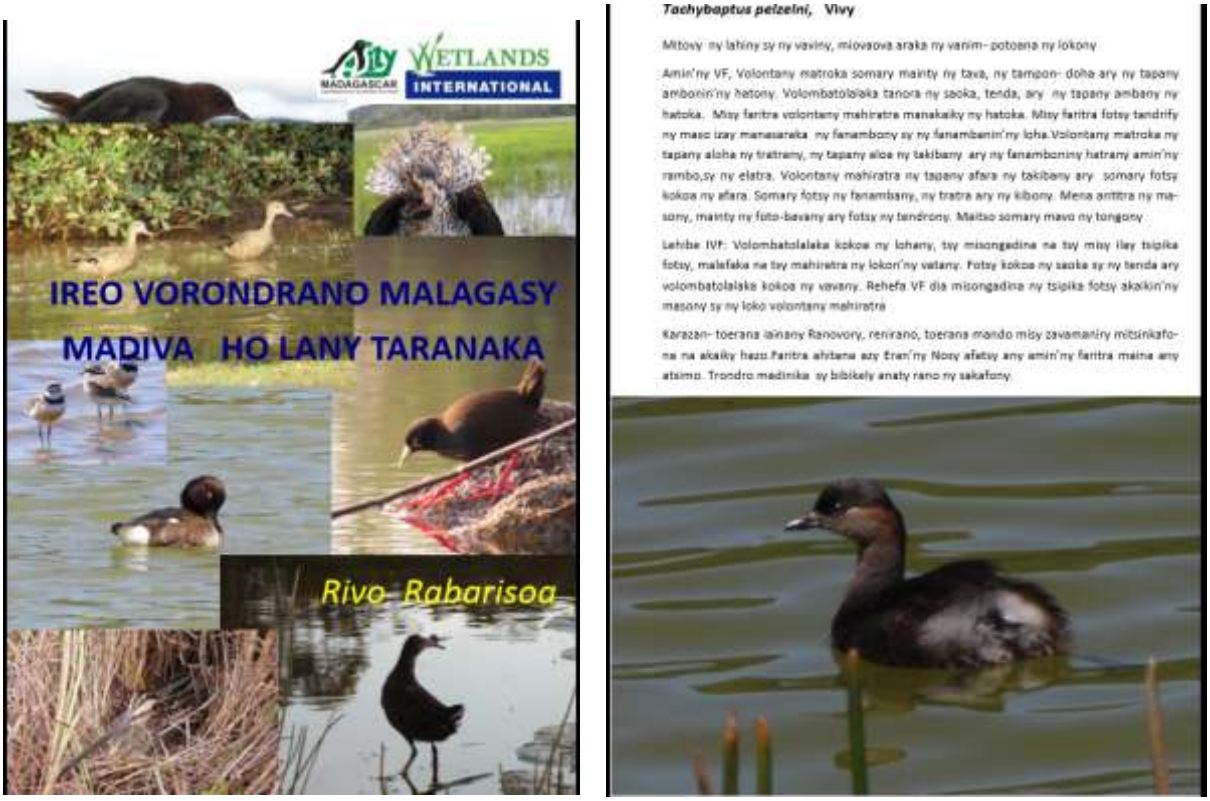
Photo 3 : Waterbirds counters in practice at Lac Tsarasaotra Alarobia (Photo Rivo Rabarisoa)

Photo 4 : Heron nesting site at Lac Tsarasaotra Alarobia (Photo Rivo Rabarisoa)

- ***Site managers' support:*** In addition to these two refreshing courses, email exchange with other site managers and observers were done concerning the organization and conduct of the IWC in Madagascar. The electronically version of the training kit "*Identification et comptage des oiseaux d'eau en Afrique*" produced by the Office National de la Chasse et de la Faune Sauvage was shared with them.

3.2.2. Production of identification guide for keys species

To support the observers on the conduct of the IWC in Madagascar, an identification guide was developed. This guide is in Malagasy language and describes 15 Malagasy threatened waterbird species with photo. The cover page and sample of species description are shown below. This guide is shared to participants and helps them to identify threatened species in the field. The following species are include inside the guide: *Tachybaptus pelzelnii, Ardea humbloti, Ardeola idea, Anas bernieri, Anas melleri, Aythya innotata, Threskiornis bernieri, Haliaeetus vociferoides, Phoeniconaias minor, Glareola ocularis, Charadrius thoracicus, Rallus madagascariensis, Gallinago macrodactyla, Sarothrura watersi,* and *Amaurornis olivieri*.



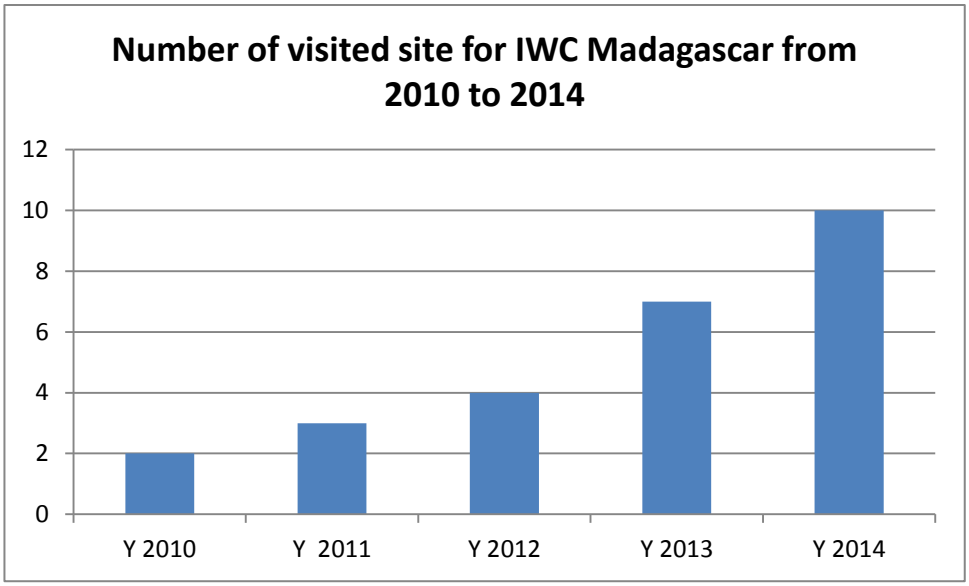
Cover page and sample of species description of the Malagasy threatened species, *Tachybaptus pelzelnii.*

3.3. Improved data management

3.3.1. Data consolidation

Data consolidation was conducted by a volunteer with support from the IWC National Coordinator (Terms of references of volunteer is appendix 2 of this report).

As a result, in total, 11 sites with 31 visits were recorded from January 2010 until February 2014. Data was collected from participants and recorded by the volunteer for IWC datasheet form. Three sites were regularly visited with at least four visits during four consecutive years: the Baie de Baly wetlands, the lac Tsarasaotra Alarobia and the Parc Botanique et Zoologique de Tsimbazaza. January-February 2014 have the maximum of site census records with at least 10 sites. The following graph shows the evolution of visited site for IWC Madagascar from 2010 to 2014 (January-February and July- August counts).



Problematic

Some other data from partners are not yet arrived because the sites are located in a remote area (list shown in table 4 below). We are still waiting for these data. We planned to receive all data by the end of March 2014.

Table 3 : List of site for which waterbird count 2014 was conducted but data are not yet received by March 10th 2014

Sites	Site statutes	Institutions responsible of the count	Count done but data not yet received
Lac Tsimaloto /Komanjia	Protected Area	MNP Ankarafantsika	February 2014
Lac Doanibe/Ankamahama	Protected Area	MNP Ankarafantsika	February 2014
Lac Mandena	No	QMM	February 2014
Lagune de Taolagnaro	No	MNP Ankarafantsika	No information
Lac Ambondrombe	No	DWCT	February 2014
Lac Bedo	Ramsar site	DWCT	February 2014
Zone humide d'Antrema	New Protected area	NAP Antrema	No information
Anosimboro /Barakaoky	New Protected area	Asity Madagascar	February 2014
Complexe des lacs Manambolomaty	Ramsar site	TPF	No information

Note: MNP; Madagascar National Parks, DWCT: Durrell Wildlife Conservation Trust; NAP: Nouvelle Aire Protégée, TPF: The Peregrine Fund Madagascar

3.3.2. Adaptation of observado.org

- ***Adoption of Observadion.org for IWC Madagascar***

The waterbird census network in Madagascar adopts the Observation.org to manage IWC data. This tool is managed by the National Coordinator Madagascar. We start to

use the tool the end of year 2013 by practicing its use. In this way, five sites boundaries were delimited for the IWC Madagascar: Lac Ravelobe, Parc Botanique et Zoologique de Tsimbazaza, Lac Tsarasaotra Alarobia, Delta Mahavavy, and lac Kinkony Lac. The shape file (KML) of these sites was sent to Wetlands International to be involved into the IWC site in Madagascar. Below are site boundaries of lac Ankarafantsika and lac Kinkony in Google Map.

Map 1 : Lac Ravelobe boundary, MNP Ankarafantsika, site for IWC Madagascar

Map 2 ; Lac Kinkony boundary (Ramsar site), site for IWC Madagascar

As a test, data for Tsimanapetsotsa Lake was already recorded under the Observado.org tool. Progress is underway for the involvement of other IWC site for Madagascar. Only two IWC sites are ready for data entry for Madagascar: lac Tsimanapetsotsa and Compexe des lacs de Manambolomaty (see figure 1)

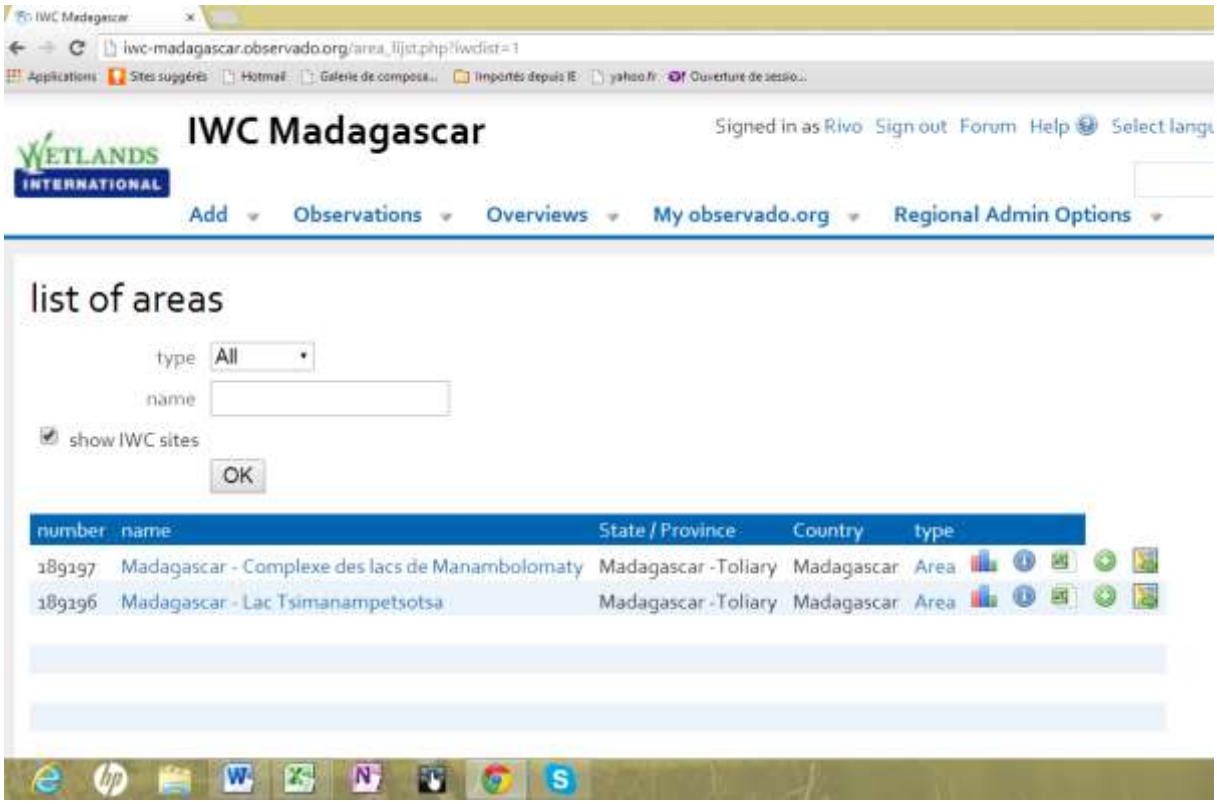


Figure 1: Existing area for the IWC Madagascar

- ***Introducing and training on the use of Observation.org*** to partners and observers

A half day workshop was conducted by the IWC Madagascar National Coordinator for the introduction and use of Observation.org on 28th February 2014. 22 participants from various Institutions partners and observers attended to this workshop (List of participant attached on appendix 4). The agenda of the workshop is introduced to the table below.

Table 4 : Workshop agenda for the introduction and use of observation.org, Asity Madagascar meeting room February 28th 2014

Time	Subject	Coach
9h00-9h15	- Welcome Introduction	AEWA Madagascar focal point representing Asity Madagascar membership
	- Brief introduction of the Observado.org -	IWC NC Madagascar
9h15 – 10h00	- Presentation of the tool and its limit for observers - The use of the tool for the IWC data - Questions/Responses	IWC NC Madagascar
10h00 – 11h30	Practice of the use of Observation.org	All participants

Photo 5 : Introduction and training of the use of Observation.org to institutions representing and observers (Photo: Rivo Rabarisoa)

4. FOLLOWING UP OF THE IWC MADAGASCAR

The next step for the IWC Madagascar is divided into two part actions: the short term action plan for 2014- 1015 and the long term action plan with five years duration (2015 – 2020).

4.1. Short term action plan

For the short term action plan, the following activities will be carried out:

- To complete integration of all IWC site to the Observation.org for and expend the use of this tool to partners and observers
- To maintain the waterbird census at all counted site in January-February 2014
- To expend the IWC network by carry on mobilization of NGO and institutions to participate into the program. At least, 75 % of Ramsar site in Madagascar will be involve into the census site
- To maintain the production of the annual report newsletter for the IWC Madagascar (next edition March 2015)
- To start to raise fund for the settlement of the long term action plan
- To support Ramsar convention, AEWA agreement and others convention (CDB,…) as the needed of the Malagasy government.

4.2. Long term action plan

The long term action plan will be planned for five years from 2015 to 2020 with the following objectives and actions:

Table 5 : Long term action plan for the IWC Madagascar

Objectives	Actions
Objective 1	**All priority sites are covered by regular counts and site monitoring activities at the appropriate time (Record site related info in the tab Priority sites)**

Action 1.1	*Identifying the gap for the Madagascar waterbird census (IBAs and other nationally important sites which are not covered yet by the census) and carry out gap filling surveys (primarily the islands for e.g. terns.*
Objective 2	**The network has adequate skills to conduct the counts and site monitoring activities systematically and reliably**
Action 2.1	*Producing identification guide for waterbird and sea bird species in Malagasy language*
Objective 3	**Observers has adequate equipment to count**
	Identify potential donors for buying equipment and prepare funding applications
Action 3.1	*Buying materials and equipment for the census*
Objective 4	**IWC data managed efficiently with minimum costs, and data submitted to Wetlands International within 12 months from the count**
Action 4.1	Checking and computerising Data Sheet from participants.
Action 4.2	Adopt Observado.org for Madagascar
Objective 5	**Timely feedback provided to the observer network**
Action 5.1	Giving feedback to participants after each achieved count (email communication/ data checking and verification)
Action 5.2	*Producing annual national report for partners, observers and government agency*
Action 5.3	*Publish results of the last 20 years of waterbird counts including trend analyses*
Objective 6	**The scheme is valued and supported by the government and site managers as an important source of data for managing key sites and waterbird populations**
Action 6.1	Mobilizing the Ministry of Environment and Forest department responsible (Direction Général des Forêts /AEWA & Ramsar focal point) to promote the waterbirds census. Conduct a meeting with them presenting the programme and asking for partnership in participating in the programme (to achieve 1.1). Launch the national report (5.2)
Action 6.2	*Mobilizing the network and activate the Malagasy Ornithology Committee under the Ministry of Environment and Forest*
Objective 7	**Scheme adequately funded**
Action 7.1	*Proposal writing with support from Wetland International*

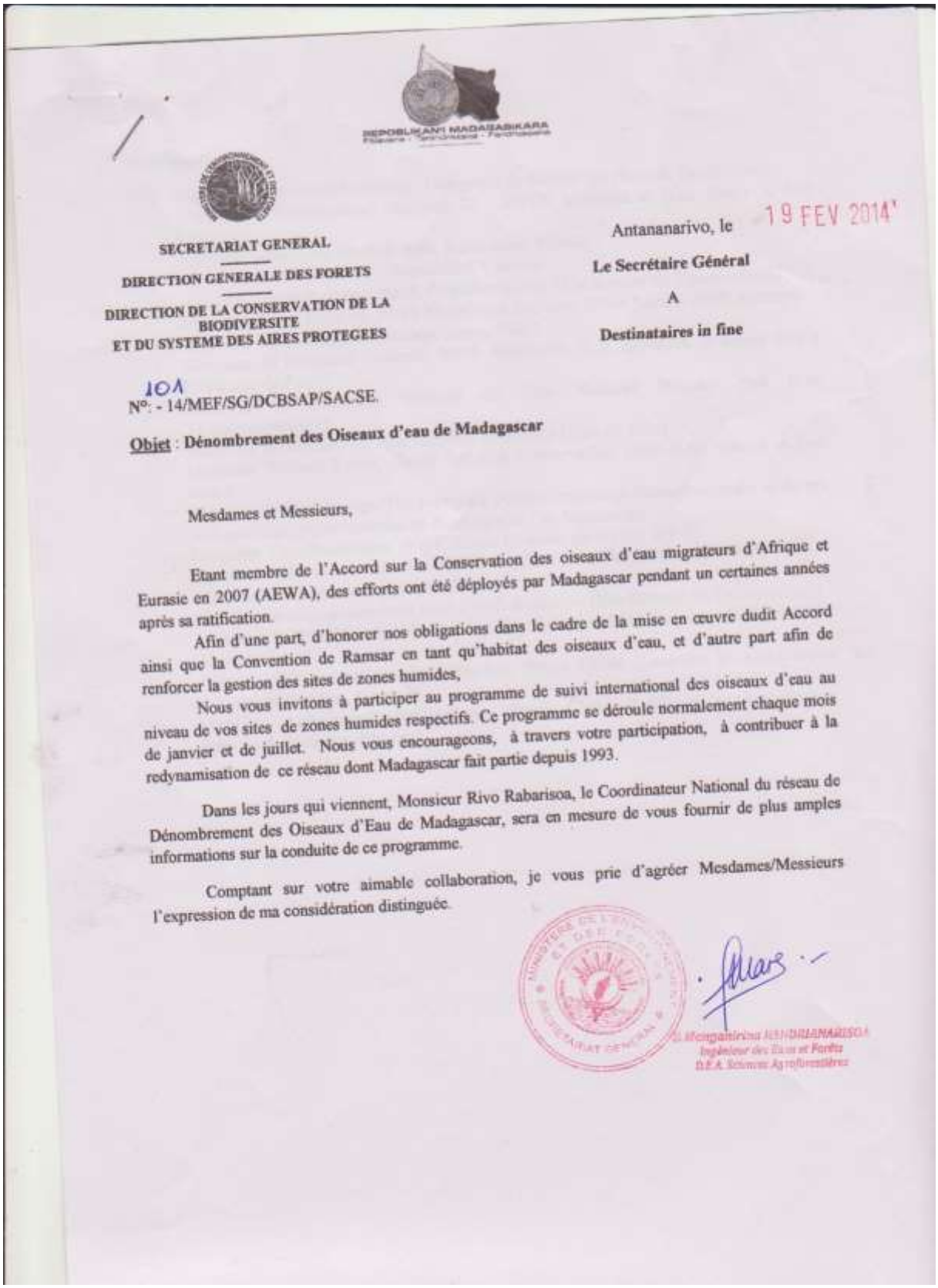
5. AKNOWLEDGMENT

We would like to thanks Wetlands International to their support on strengthening IWC Madagascar. We also thanks institutions and site managers to support the International Waterbird census in Madagascar, in particular, the following organizations for sparing time to undertake the counts and for submitting data to IWC Madagascar National Coordinator so promptly: Madagascar National Parks Ankarafantsika Madagascar National Parks Betioky Sud and WWF Tulear, Asity Madagascar, Durrell Wildlife Conservation Trust, quit Madagascar minerals, The Peregrine Fund Madagascar and NAP Antrema and also all observers.

Special acknowledgments are given to Ministry of Environment and Forest of Madagascar and Mme Zarasoa, the AEWA Madagascar focal point to support the network.

6. APPENDIX

Appendix 1: Invitation letter from the General Secretary of Environment & Forest Ministry Madagascar to mobilize site managers on waterbirds census



REPOBLIKAN'I MADAGASIKARA

SECRETARIAT GENERAL

DIRECTION GENERALE DES FORETS

DIRECTION DE LA CONSERVATION DE LA BIODIVERSITE ET DU SYSTEME DES AIRES PROTEGEES

Antananarivo, le 19 FEV 2014

Le Secrétaire Général

A

Destinataires in fine

101

N°: - 14/MEF/SG/DCBSAP/SACSE.

Objet : **Dénombrement des Oiseaux d'eau de Madagascar**

Mesdames et Messieurs,

Etant membre de l'Accord sur la Conservation des oiseaux d'eau migrateurs d'Afrique et Eurasie en 2007 (AEWA), des efforts ont été déployés par Madagascar pendant un certaines années après sa ratification.

Afin d'une part, d'honorer nos obligations dans le cadre de la mise en œuvre dudit Accord ainsi que la Convention de Ramsar en tant qu'habitat des oiseaux d'eau, et d'autre part afin de renforcer la gestion des sites de zones humides,

Nous vous invitons à participer au programme de suivi international des oiseaux d'eau au niveau de vos sites de zones humides respectifs. Ce programme se déroule normalement chaque mois de janvier et de juillet. Nous vous encourageons, à travers votre participation, à contribuer à la redynamisation de ce réseau dont Madagascar fait partie depuis 1993.

Dans les jours qui viennent, Monsieur Rivo Rabarisoa, le Coordinateur National du réseau de Dénombrement des Oiseaux d'Eau de Madagascar, sera en mesure de vous fournir de plus amples informations sur la conduite de ce programme.

Comptant sur votre aimable collaboration, je vous prie d'agréer Mesdames/Messieurs l'expression de ma considération distinguée.

Destinataires :

- Madame RandrianjafyVoahangy, Université de Mahajanga (Baie de Bombetoka)
- Madame le Coordinateurt National de ASITY Madagascar (Lac Ihotry & Lac Kinkony)
- Madame Raherilalao Marie Jeanne, Association Vahatra
- Monsieur Steeve Goodman, Association Vahatra
- Madame Baholy Ramahavalisoa, ProjetAmbatovy (Site Ramsar de Torotorofotsy)
- Monsieur Roger Edmond, Projet Bioculturel Antrema, (Zone humide NAP Antrema)
- Monsieur Julien Rémi Ramanampamonjy, PBZT
- Monsieur le Directeur National, MNP Ampijoroa (Lac Ravelobe et autres lacs à l'intérieur du Parc)
- Monsieur le Directeur National du Parc National Betioky Sud (Lac Tsimanampetsotsa)
- Monsieur le Directeur du Parc National de Soalala (Baie de Baly)
- Monsieur Richard Lewis, Durell Wildlife Conservation Trust (Lac Alaotra et Lac Bedo)
- Monsieur le Directeur du The Peregrine Fund (Complexes Manambolomaty et de ses lacs satellites, zones humides de Bealanana et Lac Mandrozo)
- Monsieur TianaRamahaleo, WWF (Zones humides gérées par WWF)
- Monsieur Rafanomezantsoa Simon, WWF, (Zones humides gérées par WWF)
- Monsieur Randrianasolo Harison, CI
- Monsieur Andrianaivomahefa Paul, Projet Ambatovy (Site Ramsar de Torotorofotsy)
- Monsieur le Président de l'Association des chasseurs (Site Ramsar de Tsarasaotra Alarobia)
- Monsieur Ramanamanjato Jean Baptiste, Projet QMM (Lanirano et Ambavarano /Lagune de la région d'Anosy)
- Monsieur AndriamandimbiarisoaLaza, Projet QMM (Lanirano et Ambavarano /Lagune de la région d'Anosy)

Appendix 2: Term of reference for IWC data management volunteer

TERME DE REFERENCES

Objet : Renforcer le programme de suivi et de dénombrement des oiseaux d'eau à Madagascar

Responsable hiérarchique

Coordinateur national de International Waterbird Census (IWC) Madagascar

Principaux rôles

Assurer la gestion des données de IWC Madagascar

Statuts

Volontaire

Activités

- Vérifier les fiches de données issues des partenaires et informer le responsable en cas d'erreur de remplissage ou le non remplissage des cases (noms & prénoms de(s) observateur(s), adresse de contact, date de comptage…)
- Vérifier les noms et les coordonnées géographiques des sites de dénombrement respectives
- Vérifier les noms scientifiques utilisés par les partenaires avec comme base de références celles utilisés par BirdLife International
- Enregistrer les données selon le format exigé par IWC en respectant les codes utilisés : data sheet form & adaptation IWC Madagascar à l'Observado.org)
- Appuyer le responsable dans l'élaboration des rapports nationaux de IWC
- Participer au programme IWC Madagascar

Durée

Cinq mois à compter de Novembre 2013

Profil

- Bac + 4 en science de l'environnement ou équivalent
- Atout :
    - Connaissance en oiseaux d'eau
    - Ayant participé au programme de IWC Madagascar et suivi des zones humides

Appendix 3: Sample of completed IWC Madagascar datashet from counters (Lac tsimanapetsotsa)

COMPILATEUR, nom et adresse :

Roland Eve, MNP/WWF Toliara

Pour information, les espèces de plan d'eau ouvert, foulque, flamant,... le nombre maximum compté simultanément ou sans risque de double comptage a été retenu ; pour les espèces des berges, gravelot, râle, ..., il s'agit des données cumulées d'un même jour.

DENOMBREMENTS D'OISEAUX D'EAU EN AFRIQUE

FORMULAIRE DE COMPTAGE

MADAGASCAR ET ILES DE L'OCEAN INDIEN

WETLANDS INTERNATIONAL

E-mail : wetlands@telecomplus.sn
Fax. +221 8206479

DATE DU COMPTAGE : 27-28 février 2014

PAYS: Madagascar

HEURE : le 27 de 16 :30 à 18 :00
le 28 de 8 :00 à 15 :30 **VISIBILITE:** 100 %

NOM DU SITE :
Lac de Tsimanampesotse

PROVINCE/REGION : Sud-ouest

GRANDE VILLE LA PLUS PROCHE : Toliara

CODE DU SITE :
(Wetlands International peut donner ce code)

MODE DE COMPTAGE :

Avion ☐ à Pied ☒ en Voiture ☐ par Bateau ☐ Mixte ☐

LE SITE A-T-IL DEJA FAIT L'OBJET D'UN COMPTAGE? OUI ☒ NON ☐
Mais information non transmise à WI
FAIT-IL PARTIE D'UN SITE PLUS LARGE, LEQUEL?

COUVERTURE DU SITE (APPROX.): %

Si moins que 100%, indiquer s.v.p. la surface couverte sur une carte schématisée

ETAT DE LA ZONE HUMIDE (p.e. inondée, sèche, polluée, modifiée) :

Lac en hautes eaux

TYPE DE COMPTAGE: TOTAL ☒ EN PARTI (échantillion) ☐

PRECISION: CHIFFRE EXACT ☒ ESTIMATION ☐
s.v.p., marquer les espèces estimées avec un 'E'

PRESENCE/ABSENCE
Si aucun décompte a été fait, s.v.p. noter la présence avec un '✓'

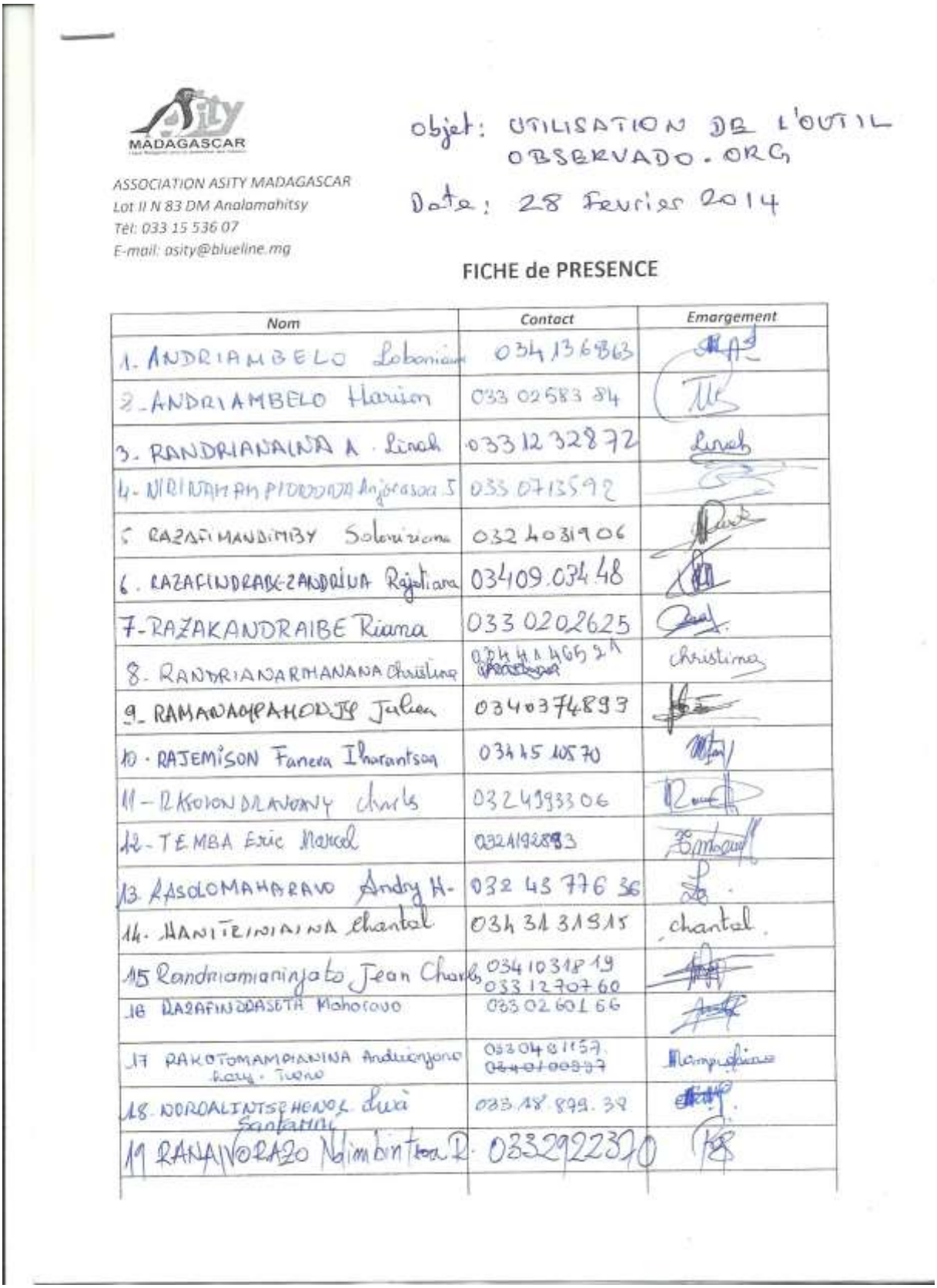
STATUT DU SITE (protection / aménagement):
Parc National ☒ Réserve Naturelle ☐ Privé ☐ Pas de Statut ☐
Autres (spécifier s.v.p.) ☐ Ramsar

PERTUBATION: BATEAU ☐ AVION VOLANT TROP BAS ☐
PECHE ☐ CHASSE /PIEGEAGE ☐ AUTRES (spécifier) ☐

OISEAUX EN REPRODUCTION: S.v.p. marquer toute espèce en reproduction par un 'B' (et indiquer le nombre de pairs si vous le savez)

Total		***GREBES***	BUTST		Héron vert - *Butorides striatus*
TACRU		Grèbe castagneux - *Tachybaptus ruficollis*	NYCNY		Bihoreau gris - *Nycticorax nycticorax*
TACPE		Grèbe malgache - *Tachybaptus pelzelnii*	IXOMI		Blongios nain - *Ixobrychus minutus*
TACRF		Grèbe du lac Alaotra - *Tachybaptus rufolavatus*	IXOSI		Blongios chinois- *Ixobrychus sinensis*
GREBE		Grèbes non ident. - *Tachybaptus spp.*	ARDEI		Ardéidés non ident. - *Ardeidae spp.*
		PELICANS	*Total*		***CIGOGNES***
PELRU		Pélican roussâtre - *Pelecanus rufescens*	MYCIB		Tantale Ibis - *Mycteria ibis*
			ANALA		Bec-ouvert africain - *Anastomus lamelligerus*
Total		***CORMORANS & ANHINGA***			
PHAAF		Cormoran africain - *Phalacrocorax africanus*	*Total*		***IBIS & SPATULES***
PHAAT		Cormoran impérial - *Phalacrocorax atriceps*	LOPCR		Ibis casqué malagache - *Lophotibis cristata*
ANHRU		Anhinga roux - *Anhinga rufa*	THRBE		Ibis sacré malagache - *Threskiornis bernieri*
			PLEFA		Ibis falcinelle - *Plegadis falcinellus*
Total		***HERONS & AIGRETTES***	PLAAL		Spatule d'Afrique - *Platalea alba*
ARDCI		Héron cendré - *Ardea cinerea*			
ARDHU		Héron de Humblot - *Ardea humblotl*			***OMBRETTE***
ARDPU		Héron pourpré - *Ardea purpurea*	SCOUM		Ombrette du Sénégal - *Scopus umbretta*
EGRAL		Grande Aigrette - *Casmerodius albus*			
EGRAR		Aigrette ardoisée - *Egretta ardesiaca*	*Total*		***FLAMANTS***
EGRDI	2	Aigrette dimorphe - *Egretta dimorpha*	PHORO	174	Flamant rose - *Phoenicopterus ruber roseus*
BUBIB		Héron garde-boeuf - *Bubulcus ibis*	PHOMI		Flamant nain - *Phoenicopterus minor*
EGRET		Aigrette/Gardeboeuf non ident. - *Egretta/Bub. spp.*	PHOEN		Flamants non ident. - *Phoenicopteridae spp.*
ARDRA		Crabier chevelu - *Ardeola ralloides*			
ARDID		Crabier blanc - *Ardeola idae*			
ARDEO		Crabiers non ident. - *Ardeola spp.*			

Appendix 4: List of participants to the use of Observado.org



ASSOCIATION ASITY MADAGASCAR
Lot II N 83 DM Analamahitsy
Tél: 033 15 536 07
E-mail: asity@blueline.mg

objet: UTILISATION DE L'OUTIL OBSERVADO.ORG

Date: 28 Fevrier 2014

FICHE de PRESENCE

Nom	Contact	Emargement
1. ANDRIAMBELO Lebonion	034 13 68 63	
2. ANDRIAMBELO Harison	033 02 583 84	
3. RANDRIANALINA A. Linah	033 12 328 72	Linah
4. NIRINJAM AN PIERRIOT Anjarasoa J	033 07 135 92	
5. RAZAFIMANDIMBY Solonirina	032 40 319 06	
6. RAZAFINDRABE-ZANDRINA Rajaliana	03409.034 48	
7-RAZAKANDRAIBE Riana	033 02 02 625	
8. RANDRIANARIMANANA Christina	034 44 466 24	christina
9. RAMANAMPAHOLIJE Julien	034 03 748 93	
10. RAJEMISON Fanera Iharantsoa	034 15 105 70	
11 – RAKOTONDRANONY charls	032 49 33 306	
12 - TEMBA Eric Marcel	032 41 928 83	
13. RASOLOMAHARAVO Andry H.	032 45 776 36	
14. HANITRINIAINA chantal	034 31 31 915	chantal
15 Randriamianjato Jean Charles	034 10 318 19 033 12 707 60	
16 RAZAFINDRASETA Mahorovo	033 02 601 66	
17 RAKOTOMAMONJINA Andrianjaka Hary Tiana	033 04 81 157 034 01 00 937	
18. NORDALINTSEHENOL Lucia Santatiny	033 18 899 39	
19 RANAIVORAZO Ndimbintsoa R.	033 29 223 70	

~~20 Ra~~		
20. RANDRIANINDRINA V. Rene Dimir	033 12 573 19 034 40 980 93	
21 TSIAVAHAMAHARY Tsaralaza Jestin	032 21 176 75 033 28 781 44 034 40 178 41	
22. ANDRIAMITANDRINA Santatra F.M.	033 05 625 65 034 34 805 95	

Appendix 5: List of participants for the refreshing course

MADAGASCAR

– FORMATION DES AGENTS DU PARC –

Objet : Appui au lancement programme de suivi OE

Date : 24/02/2014 AKARAFANTSIKA

HNP Akarafantsika

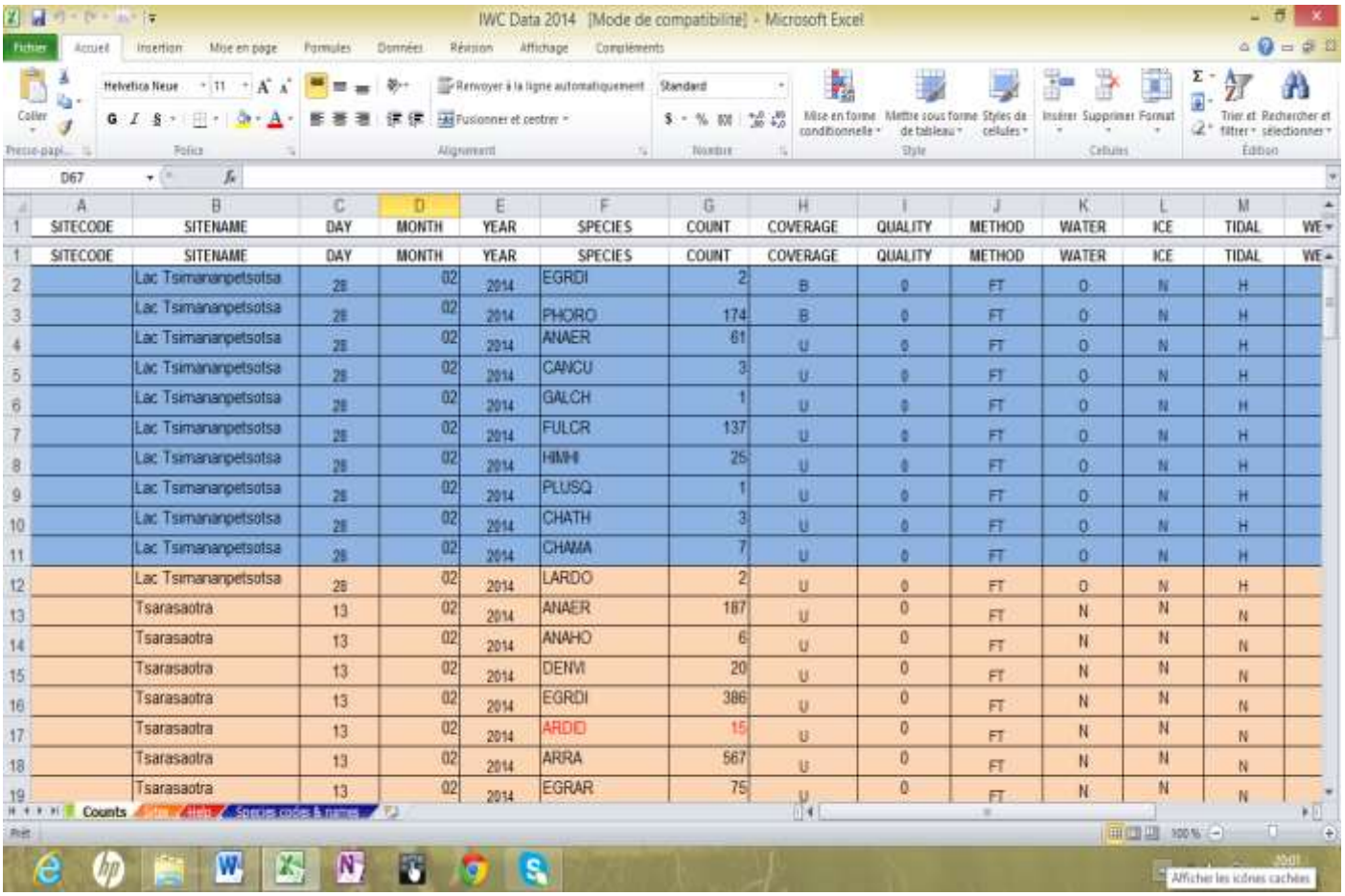
	ANARANA	contact	Sonia
1	RASOLOFOMANANA A. charles	0322613475	[signature]
2	RANDRIAMANAMPISOA Gabriel	0328709253	[signature]
3	RAZAFIMBAVAO Florentin	0334351746	[signature]
4	BAKOIZE Fernando	0337174613	[signature]
5	RAKOTONIRAMENA Alphonse	0324783393	Alphonse
6	ANDRIAHBONONJY Haingo charala	0325153942	Vonjy
7	RAHARISOANIRIANA Maria Esther		Maria
8	Randrianjumarana Christine	0344146521	Christine
9	RASOLIMANANA D.		Davidson
10	TOVONTSOA Rehotofy	0330385636	[signature]
11	TOMBO		[signature]
12	RABARISOA Rino		[signature]

12 Participants

Date 24-25 février 2014

Appendix 6: Sample of recorded data for IWC 2014, Madagascar

(Screen shoot)



SITECODE	SITENAME	DAY	MONTH	YEAR	SPECIES	COUNT	COVERAGE	QUALITY	METHOD	WATER	ICE	TIDAL	WE
SITECODE	SITENAME	DAY	MONTH	YEAR	SPECIES	COUNT	COVERAGE	QUALITY	METHOD	WATER	ICE	TIDAL	WE
	Lac Tsimananpetsotsa	28	02	2014	EGRDI	2	B	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	PHORO	174	B	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	ANAER	61	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	CANCU	3	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	GALCH	1	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	FULCR	137	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	HIMHI	25	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	PLUSQ	1	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	CHATH	3	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	CHAMA	7	U	0	FT	O	N	H	
	Lac Tsimananpetsotsa	28	02	2014	LARDO	2	U	0	FT	O	N	H	
	Tsarasaotra	13	02	2014	ANAER	187	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	ANAHO	6	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	DENVI	20	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	EGRDI	386	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	ARDID	15	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	ARRA	567	U	0	FT	N	N	N	
	Tsarasaotra	13	02	2014	EGRAR	75	U	0	FT	N	N	N	