

waterfowl conservation workshop









Regional collection planning & "new-style" EEPs

- EAZA breeding programmes have changed in their design.
- All TAG groups will now meet (or have already met) to discuss the future of programmes.
- The process begins with a work-shop to evaluate the species in the remit.





Workshop participants

Name	Organisation	Function
Bernd Marcordes	Cologne Zoo	TAG chair
Peter Smallbones	Paignton Zoo	TAG vice-chair
Johnpaul Houston	Pending	TAG vice-chair
William van Lint	EAZA Executive Office (The Netherlands)	Manager Animal Programmes and Conservation / Facilitator
Raymond van der Meer	EAZA Executive Office (The Netherlands)	Manager Population Management Centre /Facilitator
Maaike Voorham	EAZA Executive Office (The Netherlands)	Assistant Population Biologist / Support
Cathy King	Lagos	TAG member
Lois Rowell	Torquay	TAG member
Georgina Barnes	Longleat	TAG member
Glyn Young	Jersey	IUCN Threatened Waterfowl SG
Phoebe Vaughan	WWT Slimbridge	Aviculture warden
Sam Halpin	WWT Arundel	Collection Manager
Keith Lovett	Buttonwood Park Zoo	AZA Anseriformes TAG chair
Observers		
Jo Gregson	Paignton	EAZA Charadriiformes TAG vice chair / EAZA Ratite TAG vice chair
St@ve/Na\$1010		tive 🕭 ffilmal programme liaison EAZA Education Committee

New Paradigm: One size does not fit all

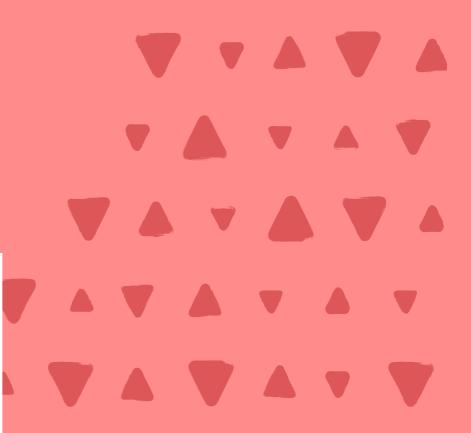
- Approved April 2017
- Reflects
 - the current breadth of population management activities
 - the needs of EAZA members
 - changes and opportunities within the conservation world at large

New Population
Management Structure





A RECENT EVALUATION OF EEPS CONCLUDED THAT ONE SIZE DOES NOT ALWAYS FIT ALL, AND THAT GREATER FLEXIBILITY COULD BE OUR BEST STRATEGY IN THE FUTURE



Three main pillars · Clearly

Regional Collection Plan

Defines for which taxa ...

Eaza Ex situ Programme



Long-Term

Management Plan

- Clearly defined roles for EAZA Ex situ Programmes
 - One Plan Approach
 - IUCN ex situ Guidelines 5-Step decision process
- One name for each taxon that needs proactive management to reach its specified roles (all other taxa monitored by TAG)
- Flexibility to create more tailor-made EEPs where required (participants, governance and general biological characteristics)
- Where relevant in and ex situ experts
- Genetic and demographic goals
- Action plan for next ~5 years to reach all roles and goals

Transition phase: JAN 2018 – DEC 2022 Priorities

Development of RCPs with 5 step process for all TAGs
Transformation of present ("old style") EEPs, ESBs and Mon-P into
"new style" EEPs (and monitoring the rest)

- Number of Long Term Management Plans during the transition phase will depend on additional staff capacity made available
- Approval of new ESBs and EEPs ("old style") will be discontinued as per 1 January 2018
- Current programme rules apply until a programme has transitioned from "old style" to "new style"



Focus of this workshop

Regional Collection Plan

Defines for which taxa ...

- Clearly defined roles for EAZA Ex situ
 Programmes
 - One Plan Approach
 - IUCN ex situ Guidelines 5-Step decision process

Eaza Ex situ Programme application

• Flexibility to create more tailor-made EEPs where required (participants, governance and general biological characteristics)

Regional scope of this RCP: EAZA region

Taxonomic scope TAG (HBW)

Anseriformes

- Anatidae ducks, geese, swans
- Anseranatidae magpie goose
- Anhimidae screamers
- Pelecaniformes (only Pelecanidae pelicans)
- Suliformes
 - Sulidae gannets, boobies
 - Fregatidae frigatebirds
 - Phalacrocoracidae cormorants
 - Anhingidae darters
- Podicipediformes (Podicipedidae grebes)
- Gaviiformes (Gaviidae loons/divers)
- **Phaethontiformes** (Phaethontidae tropicbirds)
- Procellariformes (Oceanitidae, Hydrobatidae, Diomedeidae, Procellariidae – Albatrosses, Petrels etc.)

Species selection

- In support of the Waterfowl and Pelecaniformes TAG 'vision':
 Focus on conservation depending species
 - Prioritise species in Asia
 - Reflect importance of conservation education
- Transform current EEPs/ESBs to the new style
- Realistic about available resources (staff, time, space linked to pinioning)
- AZA Waterfowl/Pelecaniformes TAG RCP priorities
- Guidance IUCN SG recommendations (7 SGs) a.o. feedback from Threatened Waterfowl SG and Pelican SG.

'Future prospects of commonly kept pinioned bird species in EAZA collections' (Dekker, 2016).

The report made clear that waterfowl collections are clearly impacted by the institutional ambitions to work towards the EAZA Standards (EAZA, 2014) and move away from pinioning versus the growing legislative limitations towards pinioning. For that reason clear guidance from the TAG was needed regarding priority species.

Species selection

Anseriformes:

- Existing EEP/ESB programmes (individual assessments)
- Endangered (incl. NT) with ex-situ population (individual assessments)
- Endangered without ex-situ population (take guidance/input from TWSG)
- Not Endangered with ex-situ population (review all, few individual assessments)
- Not Endangered without ex-situ population (no review - Mon-T DNO)

Species selection

Pelicans/cormorants

•selection as Anseriformes, take guidance/input from resp. IUCN Specialist Group

Sulidae (gannets, boobies)

 only review the species in captivity (Northern gannet), remaining species not in captivity, 2 species VU/EN, no IUCN SG.

Prodicipedidae (grebes)

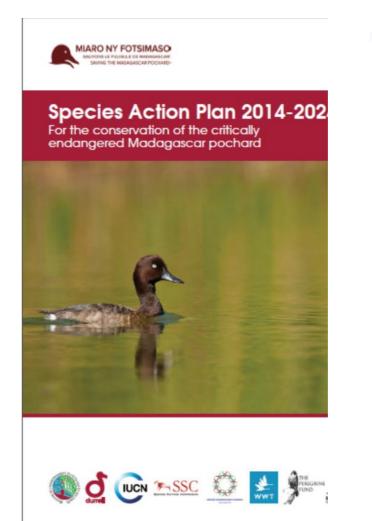
only review the species in captivity (>10 ind.)(Little grebe):
 23 species, remaining species not in captivity, 3 extinct, 2 CR, 2 EN, 1 VU, no IUCN SG.

One Plan Approach for species conservation

1. In situ and ex situ specialists together decide what is required to save a species

Checked existing action plans for ex situ recommendations

 Approached relevant SGs, for guidance/input (Threatened Waterfowl SG, Pelican SG and Cormorant SG)



EAAFP Scaly-sided Merganser Single Species Action Plan

This Single Species Action Plan has been prepared to assist fulfilment of obligations under

Convention on the Conservation of Migratory Species of Wild Animals (CMS

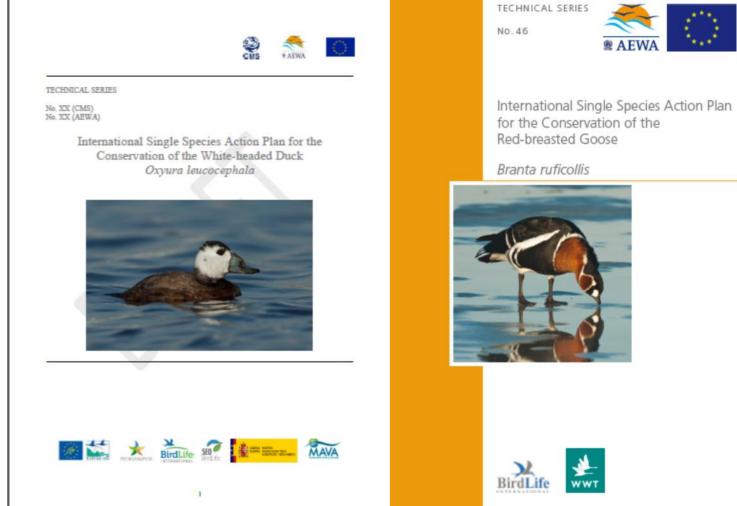
East Asian - Australasian Flyway Partnership

International Action Plan for the Conservation of the Scaly-sided Merganser Mergus squamatus, 2016–2025



CMS Technical Series No. #
EAAFP Technical Series No. #

January 2017



One Plan Approach – key elements

- 1. In situ and ex situ specialists together decide what is required to save a species
- 2. They take into account
 - Status of in situ and ex situ populations
 - Potential roles for ex situ management in the conservation of the species





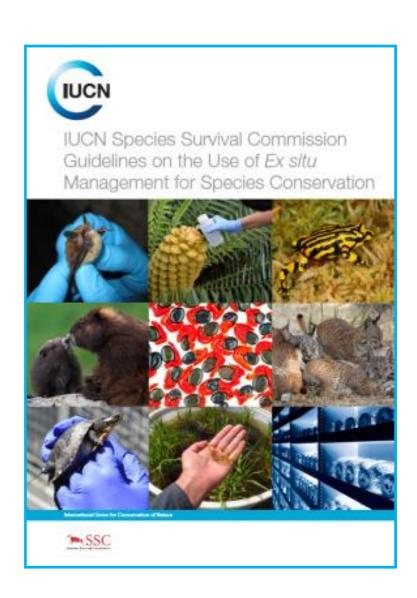
- Direct conservation roles
- Indirect conservation roles
- Non-conservation roles

of taxa under consideration

RCP workflow based on Ex situ guidelines

5 STEPS:

- 1. Gather information on in situ <u>status and</u> threats and ex situ status
- 2. Determine the potential <u>role</u> of ex situ management
- 3. Determine the <u>characteristics of the program</u> needed to deliver the role(s)
- 4. Assess benefit, feasibility and risk
- 5. <u>Decisions/recommendations</u>:
 - a) Benefits vs. challenges and risk
 - b) EEP or a form of MON-T



STEP 1: Status assessment and threat analysis in situ and ex situ

Waterfowl and Pelecaniformes RCP - 2018

Baer's pochard

Aythya baeri

Current management level: ESB

1. Status in the wild

Global IUCN Red List status: CR

Global IUCN Red List population trend: Decline

Inclusion in EU Habitat or Bird directive Appendices: N/A

CITES listing (global and EU): N/A

Convention on the Conservation of Migratory Species of Wild Animals (CMS) listing: Appendix I

Any other species specific listing if relevant: Asian Species Action Partnership (ASAP)

Range description: Breeds from the Amur and Ussuri basins in Russia southwards to the central and lower Yangtze floodplain in central-eastern China; Mainly winters in China. Populations have become increasingly sparse with total numbers estimated to be less than 1000.

2. Threats

Main threats to this species in the wild:

STEP 1: Status assessment and threat analysis in situ and ex situ



Waterfowl and Pelecaniformes RCP - 2018

3. Ex situ status

The numbers in this table are based on ZIMS entries (December 2018), no ex situ programmes are known for this species**.

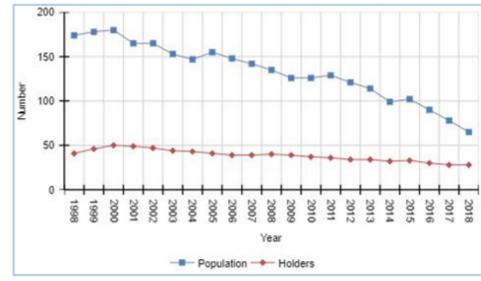
Anser canagicus / Emperor goose	EAZA Members	Other individuals in EAZA	AZA members North	Other individuals in North	Africa	Asia	Oceania	South America	Total Global Ex Situ Population		
Population size (m.f.u.)	29.27.9 (65)	region 21.21.5 (47)	America 19.15.0 (34)	America 18.12.0 (30)	0.0.0 (0)	1.1.0 (2)	0.0.0 (0)	0.0.0 (0)	88.76.14 (178)		
# Institutions	28	9	9	1	0	1	0	0	48		
Management level	-	-	-	-	-	-	-	-	-		
Data source	ZIMS Husband	ZIMS Husbandry 06 December 2018									

M.F.U = number of males females unknown sex

EAZA population census:

Growth rate (lambda)*	last 5 years	last 20 years					
Actual	0.896	0.954					
Based on Births and Deaths	0.922	0.933					
Based on Acquisitions and Dispositions	0.983	1.039					
Data source: ZIMS Husbandry Population Overview 06 December 2018							

^{*}This lambda is based on the average of the yearly growth rate based on the numbers for the EAZA population from the Population Overview from ZIMS for Husbandry.



^{*} If this is an EAZA managed programme, this includes all the institutions that are part of the managed programme, which may include some non-EAZA institutions. A list of the non-EAZA participating institutions can be found at the end of this species assessment sheet. For ESBs, MON-Ps or non-programs this only includes EAZA members.

^{**} If this is an EAZA RCP we will contact the other regions for existing analysis of existing programmes (eg. studbook publications, or Breeding and Transfer plans, or annual reports, or survey reports) but we will not request datasets and do our own analysis for populations in other regions.

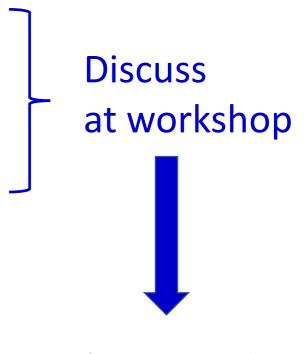
STEP 2: Potential roles for ex situ management

Roles

- Direct conservation roles
- Indirect conservation roles
- Non-conservation roles

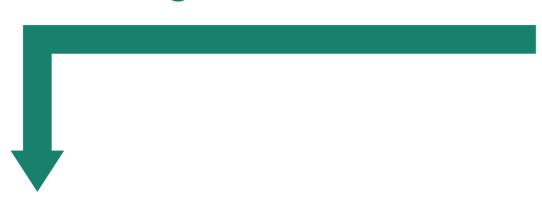
From in situ experts

From existing action
plans



List of potential roles

Where in the taxon's threat process might the tool be of use



Ex situ management can help in three different ways:

 Address primary threats and their causes

Causes of primary threats

Impact of threats on the population |

High probability of extinction in the wild

(Small N, reduced survival, reduced

fecundity, genetic isolation etc.)

Stochastic threats

(catastrophes, loss GD ...)

Primary threats

(hunting, logging ...)

 Offset the effects of threats on the (genetics and demographics) of the population

Gain time (e.g. rescue and assurance populations)

4. Population restauration

Direct Conservation roles

<u>(= Toolbox)</u>

- Ark
- Rescue (temporary or long term)
- Insurance
- Demographic manipulation
- Population restoration (source)
- Ecological replacement
- Assisted colonisation
- Research and/or training
- Education or awareness that addresses specific threats or constraints

STEP 3: Programme characteristics STEP 4: Benefits, Feasibility, Risks STEP 5: Final selection of roles (if any)

Conservation roles for ex situ management

Indirect Role(s)	Programme	Benefit	Feasibility	Risk	Role	Can EAZA	Notes
	characteristics required				recommended?	deliver this	
						role?	
(EXAMPLE)							
Education (non- range)	Requires good attractive exhibits to improve image and a targeted education effort	HIGH	HIGH	LOW	Yes	Yes/No/only in collaboration with	Help improve public perception of hyenas (as worth saving) and channel carnivore conservation funding towards hyenas as well (all species)

Non-conservation roles for ex situ management

In contrast to the non-conservation roles, each column in this table should be completed specifically limited to EAZA.

Other Role(s) (in/for EAZA)	Programme characteristics required (in EAZA)	Benefit to EAZA comm.	Feasibility in/by EAZA comm.	Risk for/within EAZA	Role recommended in/for EAZA	Can EAZA deliver this role?	Notes
EXAMPLE Particularly attractive species: engaging, distinctive, active, noisy, colourful	Natural groups in large exhibits	HIGH	MODERATE	LOW	Secondary role	Yes	Public engagement benefit

RCP categories

- EEP: needs proactive management to reach it role(s)
- All other taxa are monitored by the TAG:
 - MONT-T REPLw
 - MON-T Phase out
 - MON-T DNO
 - MON-T

→ Final overall check: Is it feasible to implement all recommended EEPs!

TAG members

TAG chair Bernd Marcordes | Cologne Zoo

TAG vice chair Peter Smallbones | Paington Zoo

TAG vice chair Johnpaul Houston | Pending

Programme coordinators and Mon-P (alphabetic order, surname)

Anna Kazazou | Attica | White-fronted goose

Georgina Barnes | Longleat | Pink-backed pelican ESB

Agnieszka Mech | Poznan | Dalmatian pelican EEP

Martin Kaiser | Berin_Tierpark | Little pied cormorant ESB

Cathy King | Lagos | Seaducks and Hawaiian Duck

Joost Lammers | Alphen | Screamers

William van Lint | EAZA Executive Office | White-winged duck ESB

Fleming Nielsen | Copenhagen | Pygmy geese

Pending | Blackpool | Scaly-sided merganser ESB

Tobias Rahde | Berlin_Zoo | Red-breasted geese

Lois Rowell | Torquay | Bank cormorant

Nigel Simpson | Bristol_wildplace | Philippine duck and marbled teal

Peter Smallbones | Paignton | Bear's pochard ESB

Harriet Whitford | Jersey | Mellers duck EEP, Madagascar teal





Anas melleri Meller's duck



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes – Former	programmes (EEPs/ESB	s)					
Meller's duck	Anas melleri	EN	157 (28)	<u>Insurance</u>	Conservation Education Research (Best Practice)		EEP

EEP: Harriet Whitford, Jersey

Asarcornis scutulata White-winged duck



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Anseriformes – Former	programmes (EEPs/ESE	Bs)					
White-winged	Asarcornis	EN	64 (22)	Rescue (locally),	<u>Research</u>		EEP
duck	scutulata			<u>Insurance,</u>	(husbandry)		
				Conservation			
				Education,			
				Research (Avian			
				TB, training)			

EEP: William van Lint, EAZA-Office

Aythya baeri Baer's pochard



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
	r programmes (EEPs/ESB	s)	T	T			
Baer's pochard	Aythya baeri	CR	133 (20)	<u>Insurance,</u>	Fund-raising,		EEP
				Conservation	<u>Model</u>		
				Education	species,		
					Conservation		
					Education		

EEP: Peter Smallbones, Paignton

Mergus squamatus Scaly-sided merganser



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes – Former	programmes (EEPs/ESB	s)					
Scaly-sided	Mergus	EN	6 (3)	Insurance,	Research		EEP (in
merganser	squamatus			Training,	(husbandry),		collaborat
				Research	fund-raising,		ion with
					Model species		AZA/WW
							T)

EEP: Blackpool, Johnpaul Houston

Anas bernieri Madagascar teal



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
Madagascar teal	Anas bernieri	EN	162 (36)	<u>Insurance</u>	Conservation Education		EEP

EEP: candidate Simon James, Jersey

Seaducks



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
		VU	7 (1)	Conservation	Research	Exhibit	EEP
				Education	(work on Best	value	(seaducks
Long-tailed	Clangula				Practice),)
duck	hyemalis				Model species		

EEP: Candidate Sam Halpin (Paignton/ WWT Arundel)

Marmaronetta angustirostris Marbled Teal



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
		VU	228 (30)	<u>Population</u>			EEP
				Restoration			
				(locally),			
				Insurance,			
	Marmaronetta			Conservation			
Marbled teal	angustirostris			Education			

EEP: vacant (Nigel Simpson, Wild Place?)

Oxyura leucocephala White-headed duck



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
		EN	88 (13)	<u>Population</u>	Research (Best	<u>Exhibit</u>	EEP
				<u>Restoration</u>	Practice)	<u>value</u>	
				(locally),			
				Insurance,			
White-headed	Oxyura			Conservation			
duck	leucocephala			Education			

EEP: candidate Matthé Groot, Cologne

Anser erythropus Lesser white-fronted goose



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	ation (>10) individuals in	EAZA region)			
		VU	106 (20)	Population			EEP
				Restauration,			(in
				Insurance,			consultati
				Conservation			on with
Lesser white-	Anser			Education			Nordens
fronted goose	erythropus						Ark)

EEP: candidate Anna Kazazou?, Attica

Branta ruficollis Red-breasted goose



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
		VU	329 (56)	<u>Insurance,</u>	Fund-raising	<u>Exhibit</u>	EEP (?)
Red-breasted				Conservation		<u>value</u>	
goose	Branta ruficollis			Education			

EEP: candidate Tobias Rahde, Zoo Berlin

Cyanochen cyanopterus Blue-winged goose



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Anseriformes - Endang	ered with ex-situ popula	tion (>10) individuals in	EAZA region)			
		VU	27 (14)	<u>Insurance</u>			EEP (in
							collaborat
Blue-winged	Cyanochen						ion with
goose	cyanoptera						AZA)

EEP: candidate Jan Harteman

Pelecanus crispus Dalmatian pelican



Common name	Scientific name	Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants,	gannets and grebes						
Dalmatian	Pelecanus	NT	588 (59)	Insurance,		<u>Exhibit</u>	EEP
pelican	crispus			Conservation		<u>value</u>	
				Education,			
				<u>Research</u>			
				(veterinary)			

EEP: Agnieszka Mech, Poznan

Pelecanus rufescens Pink-backed pelican



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants,	gannets and grebes	•					
Pink-backed	Pelecanus	LC	205 (26)			<u>Exhibit</u>	EEP
pelican	rufescens					<u>value,</u>	
						<u>model</u>	
						<u>species</u>	

EEP: Ryan Berry, Longleat

Pelecanus philippensis Spot-billed pelican



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants,	gannets and grebes						
Spot-billed pelican	Pelecanus philippensis	NT	69 (8)	Insurance, Research (veterinary)	Fund-raising	Exhibit value	EEP

EEP: vacant/ Ryan Berry, Longleat

Grebe



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants, §	gannets and grebes	•	•				
Little grebe	Tachybaptus	LC	18 (8)		<u>Model</u>		EEP
	ruficollis spp.				species,		(grebes)
					Conservation		
					Education		

EEP: vacant

Microcarbo melanoleuco Little pied cormorant



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants, g	gannets and grebes						
Little pied cormorant	Microcarbo melanoleucos	LC	29 (6)				Mon-T
	spp.						

Downgraded to MON-T

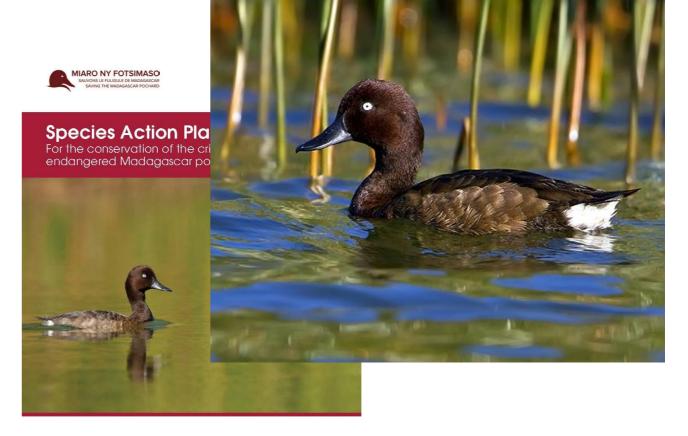
Mergus octocetaceus Brazilian merganser



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants,	gannets and grebes						
		CR	-	Insurance			Mon-T
Brazilian	Mergus						
merganser	octosetaceus						

MON-T

Aythya innotata Madagascar pochard



Common name	Scientific name	IUCN Red List	EAZA Population size total # in # EAZA zoos	Direct Conservation role(s) recommended for ex situ management	Indirect Conservation role(s) recommended for ex situ management	Non- conservation role(s)	RCP category
Pelicans, cormorants, §	gannets and grebes	1	T	ı		ı	1
		CR	_	<u>Population</u>			(EEP)
				Restauration,			Mon-T
				<u>Insurance,</u>			
				Conservation			
				Education,			
Madagascar				Research/Traini			
white-eye /	Aythya			ng, Model			
pochard	innotata			<u>species</u>			

MON-T (Simon James, Jersey)

Next steps

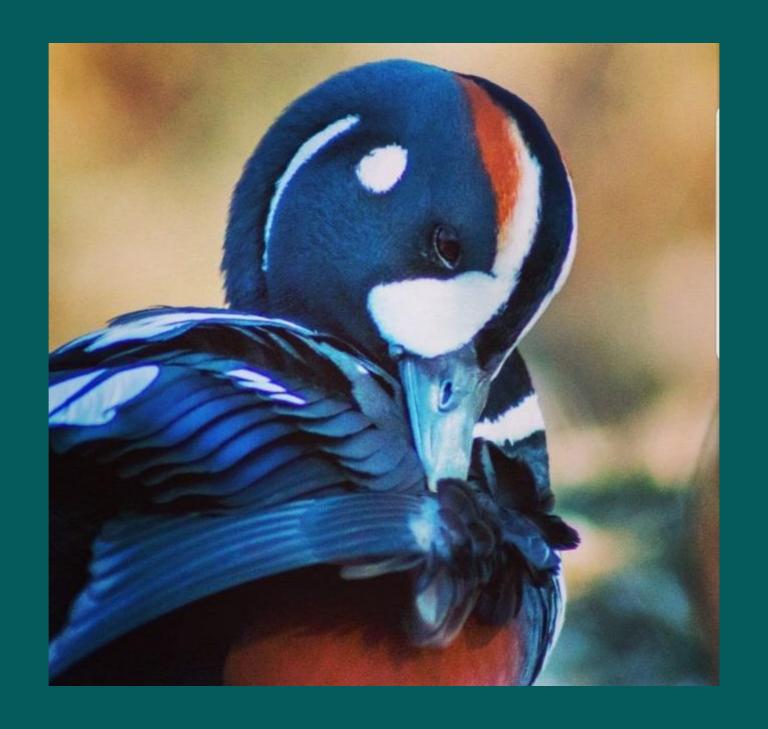
- Produce RCP report.
- Work on the EEP applications together with the (nominated) coordinator.

Start prioritising LTMPs





Thank You For Listening





JOHNPAUL HOUSTON

→ MANCHESTERZOO.CO.UK

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MANCHESTERZOO

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MANCHESTER_ZOO



