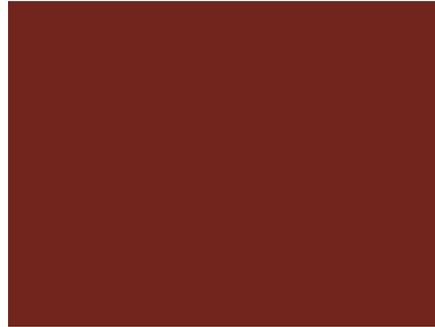


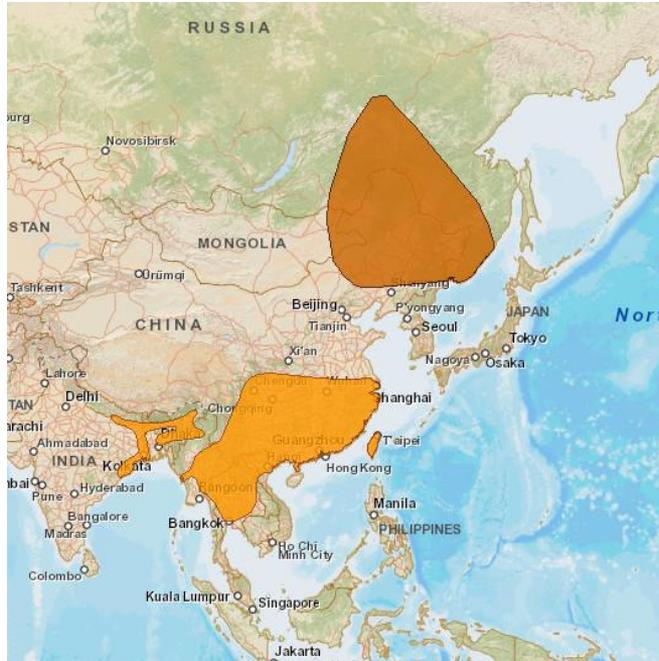
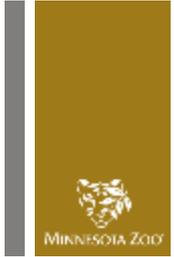
Baer's Pochard
Aythya baeri



Baer's Pochard in the US, an Assurance
and Research Population for Raising
Public Awareness

Jamie Ries, Bird Supervisor, Minnesota Zoo

IUCN Redlist: Critically Endangered



- Listed on Appendix I of the CMS in 2012.
- Not listed by CITES.
- In decline since the 1980s:
 - Threatened in 1988
 - Vulnerable in 1994
 - Endangered in 2008
 - Critically Endangered in 2012

Biological Assessment¹

Global Population

- The wild population remains poorly known.
 - Fewer than 300 individuals thought to be in the wild
 - Extensive surveys have not been done due to lack of resources and the size of sites it occupies

Surveys

- Despite winter surveys which indicate there are more than 200 birds in the population, summer surveys in the breeding grounds produce few individuals.⁴
- The maximum number of birds accounted for in a single season is 80 in late summer 2014.
- Four sites are known to regularly support BAPO during the breeding season; one in Russia and three in China.



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 Single Species Action Plan for the Conservation of the
Baer's Pochard (*Aythya baeri*)**



CMS Technical Series No. #

EAAFP Technical Series No. #

January 2015



ISSAP for Baer's Pochard

- Baer's Pochard Task Force Identified in 2015
- Implementation Workshop to be held in Spring 2016
- Surveys to follow in Summer 2016, pending funding

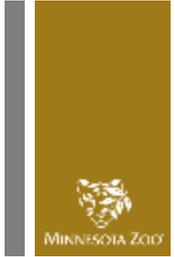


ISSAP

7 Results are planned to be achieved by 2019:

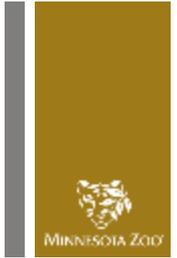
- Result 1. The impact of habitat loss or inappropriate management is understood and significantly reduced.
- Result 2. The impact of harvesting of birds and eggs from the wild is understood and significantly reduced.
- Result 3. Knowledge of the ecological requirements of Baer's Pochard is significantly improved.
- Result 4. The understanding of population status, distribution, key sites and demography is significantly improved.
- Result 5. A network of protected and well managed sites is established and maintained throughout the range of the species.
- Result 6. A global management strategy for the captive population is developed and implemented.
- Result 7. Awareness of Baer's Pochard and its conservation needs is significantly enhanced, particularly among decision-makers.

European Population²



- European Studbook by Peter Smallbones, Paignton Zoo Environmental Park
 - 2012 and 2015
- Annual Report lists 111.94.4 as of 31 Dec 2015 at 22 locations (EAZA and private)
- 2015 EAZA Studbook lists 89.87.7 at 20 Institutions as of 9 Feb 2015
- Difficulty placing offspring; needs new holders; pinioning vs. full-winged birds are an issue.

US Population



- 3.3 Imported by Sylvan Heights in 2007
- 3.3 Imported by Pinola Conservancy in 2010
- Birds first came into AZA via Central Park Zoo in 2012
- 45.48 in 11 combined Private and AZA locations as of 28 Oct 2013
- Much of the population has unknown parentage



Plan for the future

Goals within the US

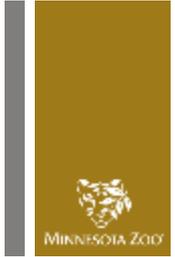


Publish US Studbook in 2016

- Identify current holdings in AZA and private populations
- Establish a breeding and transfer plan for current census
- Educate holders on the information needed to manage this group as an assurance population

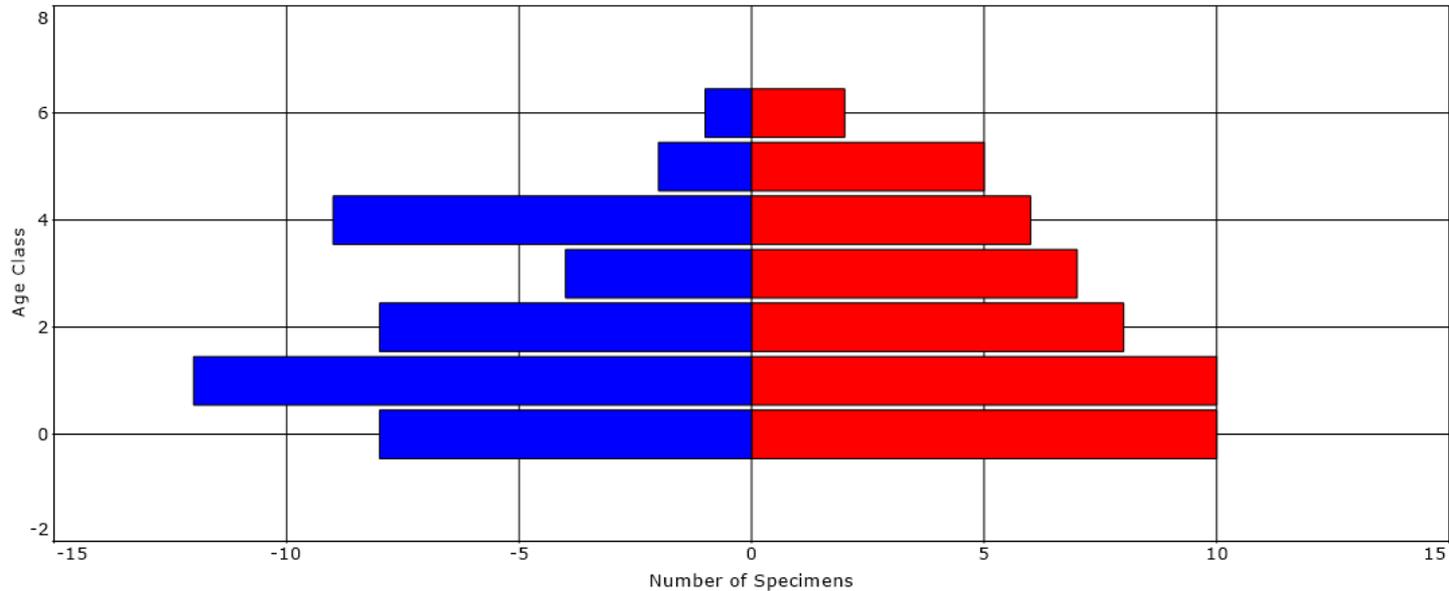
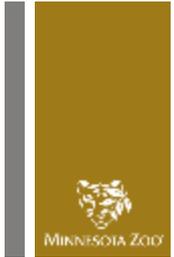


Assurance Population

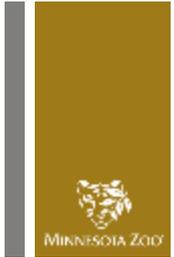


- There are currently a total of 62.65.15 at 19 locations
 - 31.30 at 10 AZA facilities
 - 20.23.15 at Sylvan Heights, Pinola Conservancy and Livingston Ripley Waterfowl Conservancy
 - 12.12 at 6 private locations
 - More unknown

US Population Overview—Age pyramid



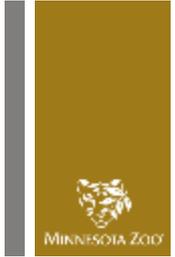
Assurance Population



- New holders coming on board at 5 new locations
- Current holders are yet at max capacity
- Identified at least 20.17 spaces in 2016.

LOCATION	CENSUS	MAX	HOLD OFFSPRING	NEEDS	PINIONED	FULL-WINGED
Buttonwood Park Zoo	2.0	3.3	12 months	0.2	x	x
Akron Zoo	0.0	3.3	12 months	3.3	x	
Woodland Park Zoo	1.1	2.2	6 months	1.1	x	x
Omaha's Henry Doorly Zoo	0.0	3.3	no limit	3.3	x	
Lincoln Park Zoo	0.0	2.2	12 months +	2.2	x	x
San Diego Zoo's Safari Park	0.0	3.3	6 months	3.3	x	
Busch Gardens Tampa	0.0	2.2				
Denver Zoo	1.2	2.2		1.0		
LRWC	12	10.10+	8 months	2.0	x	x
San Antonio Zoo	2.2	5.5	12 months	3.3	x	
Toledo Zoo	8.10	10.10	12 months			
Minnesota Zoo	3.4	5.5	12 months	2.0	x	x
				20.17		

Assurance Population



- Encourage each breeding facility to make contact with their private holders once annually to update the census
- Provide them with my information should they want to be included in the studbook
 - May remain confidential, but their birds can still be included

Pursue a Global Species Master Plan?

- The EAZA studbook is having trouble placing full-winged animals
- Could we plan another import to improve our genetic diversity?
- Develop the global management strategy among private and public holders



Research Population

- Clutch sizes and egg data
- Hatching success
- Mortality under 10 days per hen
- Survivability past 30 days
- Longevity
- Broods seen from March to August
- Track abnormalities: Poor doers, wing droop, etc.



Data: What can we learn?³

- Minnesota Zoo has a 20+ year history of breeding Crested Wood Partridges
 - Over 800 eggs in the egg log
 - Weight, length, width measured on each egg
 - Parentage recorded for almost all eggs
- 44% of all birds produced at Minnesota were at least somewhat inbred
- 18% of birds in all other AZA institutions were at least somewhat inbred

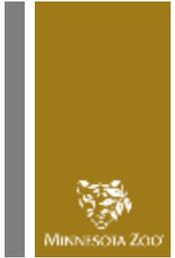
Data: What can we learn?³

Higher % of inbreeding in
CWP at MNZOO

- 8% reduction in egg volume
- 10% reduction in egg weight
- 20% reduction in hatch rate
- 51% reduction in 30 day survival
- Birds with lower levels of inbreeding have 41% fewer medical notes than their more inbred counterparts.

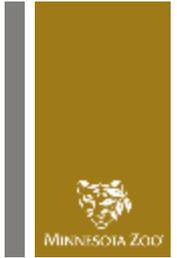


Research Population



- WWT is conducting genetic testing on their flock of 72 Baer's Pochard in order to determine if their birds are genetically pure.⁴
 - Results suggest no strong evidence of hybridization or inbreeding
 - Genetic drift between wild BAPO and captive stock
- EAZA population has not been surveyed
- Can we survey the US population?
 - Molecular data could be incorporated into their pedigrees to help us put together a meaningful captive management plan

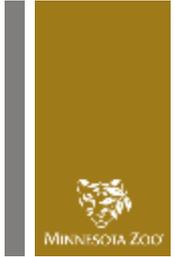
Educating the Public



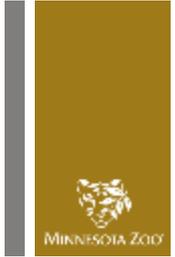
- AZA Safe Nominate Species
 - Saving Animals From Extinction is a new, AZA-wide effort aimed at saving species and engaging people in conservation action.
- AZA accredited facilities are in a position to educate large groups of people
 - Early Education
 - Social Media
 - Use our voice to help protect habitat

Raise Awareness⁴

- Leaflets and identification guides distributed to hunting authorities, hunters, local villagers and nature lovers in the BAPO range in 2014⁵
- Activities to address threats
- Protect known breeding habitat; educate local farmers
- Summer census in 2016 largely will rely on public bird watchers
- Report locations, date, flock size, and sex ratio to the Baer's Pochard Task Force
- monitoring@wwt.org.uk



References



- ¹ International Single Species Action Plan for the Conservation of the Baer's Pochard (*Aythya baeri*). January 2015.
- ² Baer's Pochard *Aythya baeri* ESB Annual Report 2015. Peter Smallbones, Paignton Zoo Environmental Park.
- ³ Data compiled by Kevin Willis, Minnesota Zoo.
- ⁴ The Troubled Baer's Pochard *Aythya baeri*: Cause For a Little Optimism? Richard Hearn. *BirdingASIA* 24 (2015): 78–83.
- ⁵ Emergency Measures to Save Baer's Pochard: Locations of Breeding Sites in Russia. D. Solovyeva , A. Antonov, O. Goroshko, V. Pronkevich, and S. Surmach. December 2013.

Thank You

Judith Wolfe—photography

Sylvan Heights

Pinola Conservancy

US holders of Baer's Pochard

Richard Hearn—Wildfowl & Wetlands Trust (WWT)

Peter Smallbones—Paignton Zoo Environmental Park

Tom Ness—Minnesota Zoo, PMC Adjunct

