

# Anseriformes Taxon Advisory Group Update

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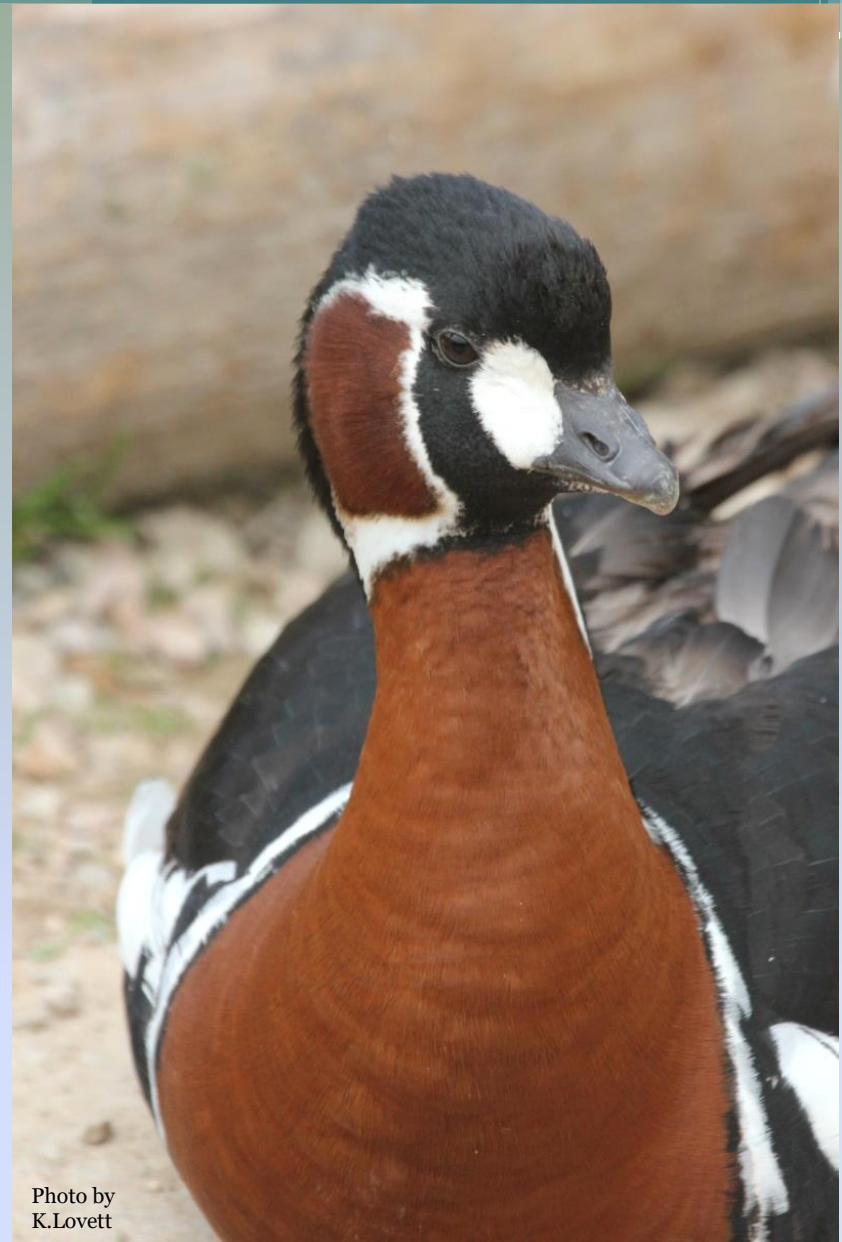


Photo by  
K.Lovett

# Regional Collection Plan

## 2020



Regional Collection Plan  
3rd Edition • 2020 - 2025



Scaup-billed Merganser  
*Mergus squamatus*  
Photo By Pinola Conservancy

Edited by  
Keith Lovett, Anseriformes TAG Chair  
Buttonwood Park Zoo

ASSOCIATION  
OF ZOOS  
& AQUARIUMS

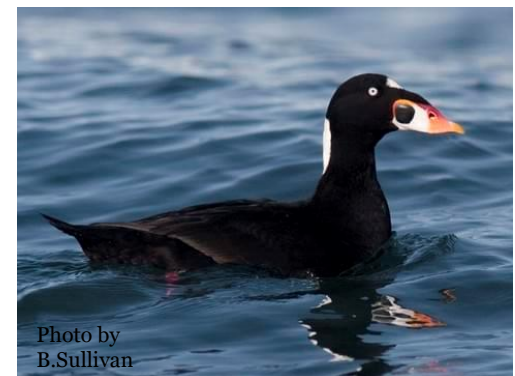
# Reasons for Population Decreases in AZA

- Less zoo exhibits for waterfowl being built
- More of a focus on mega-vertebrates
- Less opportunity for non-flighted flocks
- Less partnerships with private sector/less private sector
- Loss of husbandry/rearing knowledge
- Generational loss of love of waterfowl



# AZA Waterfowl Data

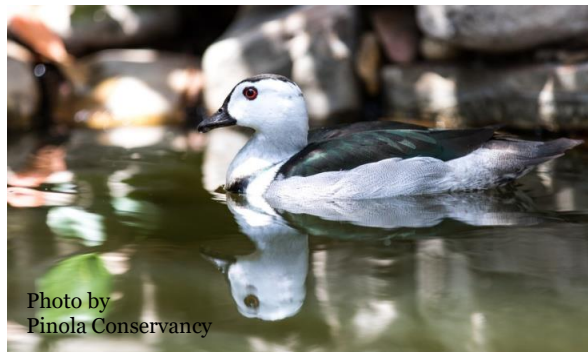
- 2019 space survey conducted with 169 responding institutions combined with ZIMS data
- 146 Anseriformes species housed in AZA institutions
- Of 146 species/subspecies, space survey respondents identified desire to maintain/increase 128 species (87%). Many of these species are not sustainable.





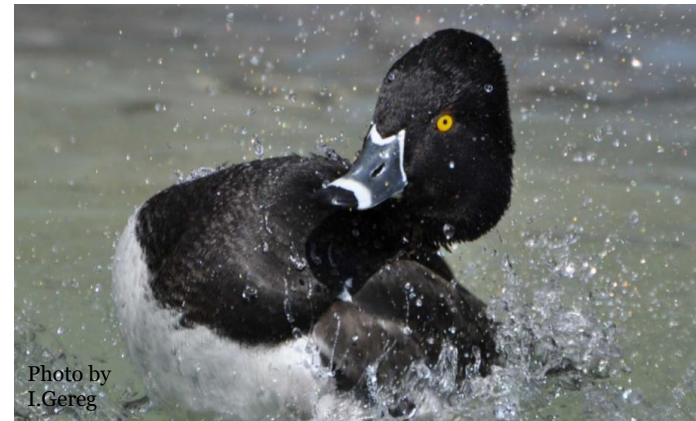
# AZA Animal Program Designation

Applying Sustainability Criteria to Designate Animal Program Management Level Criterion	Green SSP Program	Yellow SSP Program	Red SSP Program	Candidate Program
Population size (Total N)	50 and above	50 and above	20 - 49	19 and fewer
# AZA member organizations	3 and above	3 and above	3 and above	2 and fewer
Projected % GD at 100 years or 10 Generations	90.0% and above	Less than 90%	Less than 90%	N/A

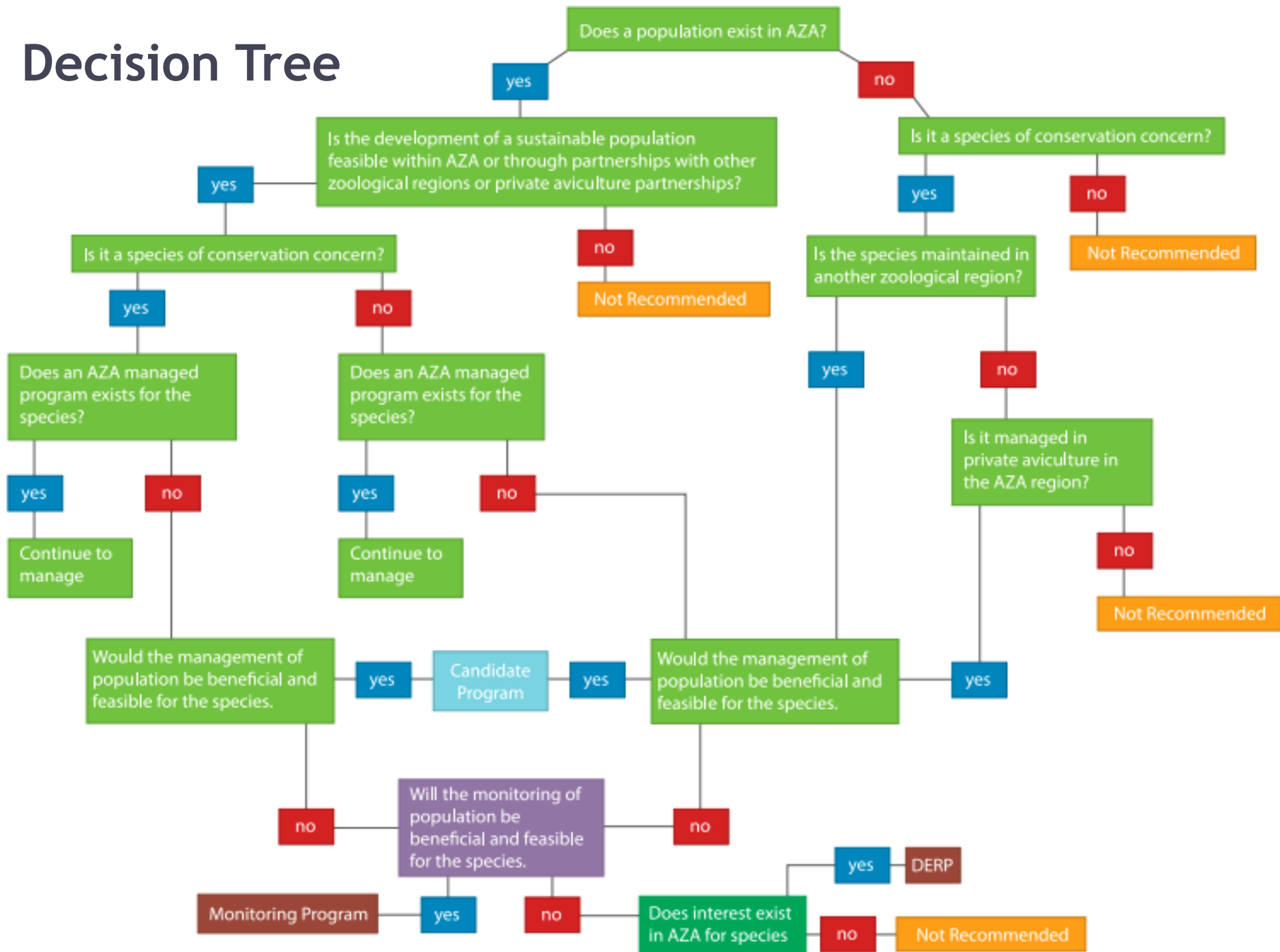


# AZA Animal Program Designation Cont.

- **Monitored** - During this RCP cycle the TAG will develop a new program to monitor seven of its populations. These populations have been realizing some level of decline in their captive populations over the last decade and/or are of conservation concern in the wild.
- **DERP**- Species that serve a zoo role of display, education, research, or conservation program.
- **Not Recommended** - Species the TAG is not recommending for housing or breeding



# Decision Tree



# AZA Anseriformes TAG SSP Stats

- Currently 1,552 managed waterfowl specimens across 16 SSPs
- Desired capacity in five years to be 2,034 specimens (31% increase)

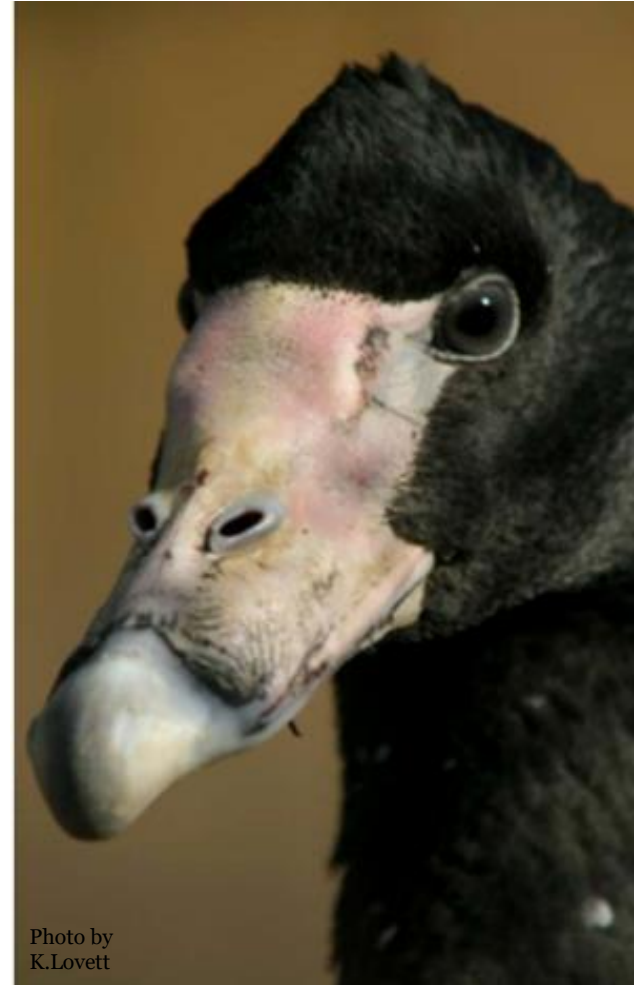


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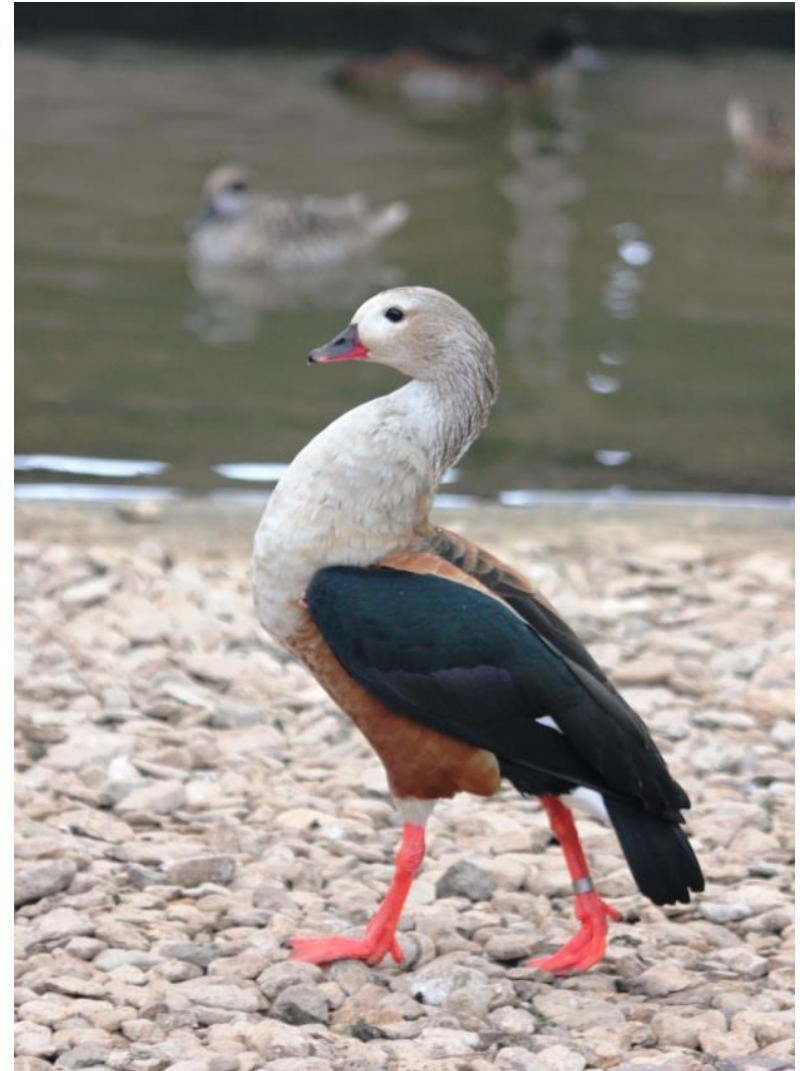
# Yellow SSPs



- White-winged duck
- African pygmy goose
- Swan goose
- Trumpeter swan
- Nene (Hawaiian goose)
- Crested screamer
- Marbled teal
- Spotted whistling duck
- West Indian whistling duck
- Madagascar teal
- Red-breasted goose
- Scaly-sided merganser
- Baer's pochard

# Red SSPs

- Indian pygmy goose
- Orinoco goose
- Coscoroba swan



# Candidate

- Philippine duck
- Emperor goose
- Blue-winged goose





# Monitored

- Laysan duck
- Falcated duck
- Magpie goose
- Cape shelduck
- Hartlaub's duck
- Spectacled eider
- White-headed duck



# DERP - 50 species

- Black-bellied whistling duck
- Fulvous whistling duck
- White-faced whistling duck
- Javan whistling duck
- Ringed teal
- Australian wood duck
- Mandarin duck
- North American wood duck
- Cape teal
- Chiloen wigeon
- American wigeon
- Blue-winged teal
- Red shoveler
- Northern shoveler
- White-cheeked (Bahama) pintail
- Northern pintail
- Baikal teal
- Am. green-winged teal
- Silver teal
- Puna teal
- Hottentot teal
- Red-crested pochard
- Rosy-billed pochard

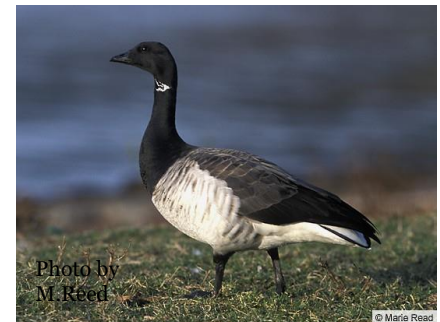
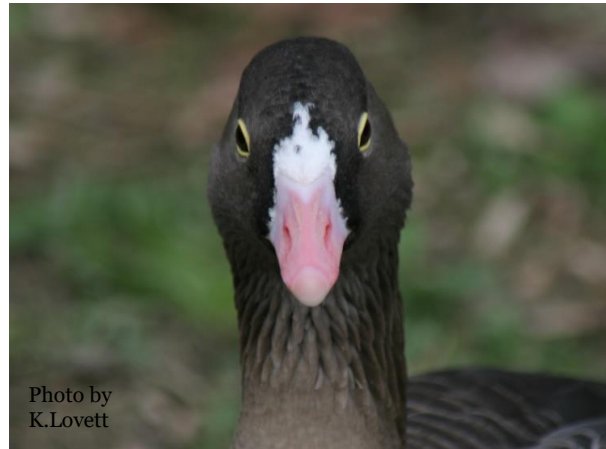


# DERP Cont. - 50 species

- Canvasback
- Redhead
- Ring-necked duck
- Lesser scaup
- Ferruginous white-eye
- North American ruddy duck
- Pacific common eider
- Harlequin duck
- Long-tailed duck
- Bufflehead
- Barrow's goldeneye
- Smew
- Hooded merganser
- Cape Barren goose
- Freckled duck
- Pink-eared duck
- Andean goose
- Ruddy-headed goose
- Common shelduck
- Radjah shelduck
- Old World comb duck
- Bar-headed goose
- Ross's goose
- Barnacle goose
- Pacific Brant
- Black swan
- Black-necked swan

# Not Recommended

- 85 species





# Yellow Species Survival Plan Programs



# Southern Screamer

Joanna Klass

Woodland Park Zoo

- Yellow SSP
- 60.43.6 (109) at 44 AZA Institutions
- RCP Target population: 115
- IWWA 2016 Survey: 46.36.1(83)



## Program Goals:

- Recruit 2 holders a year to meet RCP target size by 2025
- Develop breeding and rearing strategies
- Perform a mortality/morbidity analysis

# Spotted Whistling Duck

Ian Shelley

Maryland Zoo

- Yellow SSP
- 69.61 (130) at 19 AZA Institutions
- RCP Target population: 130
- IWWA 2016 Survey: 30.28.6 (64)

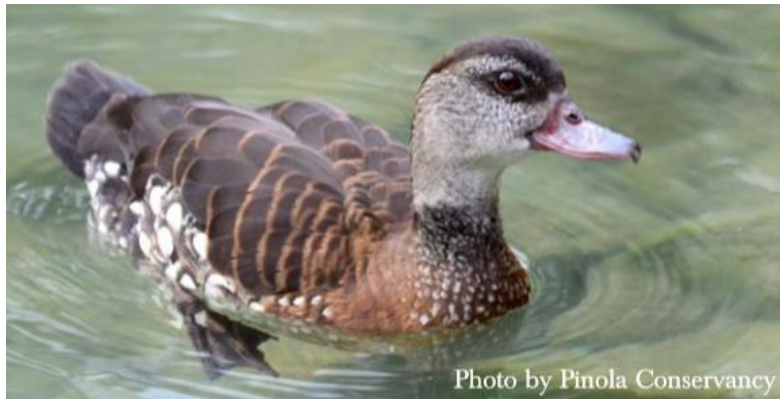


Photo by Pinola Conservancy

## **Program Goals:**

- Studbook into ZIMS
- Recruit two new holders each year
- Mixed species analysis to expand population



# West Indian Whistling Duck

Mindy Rabideau

Tracy Aviary

- Yellow SSP
- 37.34 (71) at 20 AZA Institutions
- RCP Target population: 100
- IWWA 2016 Survey: 56.54.5 (115)



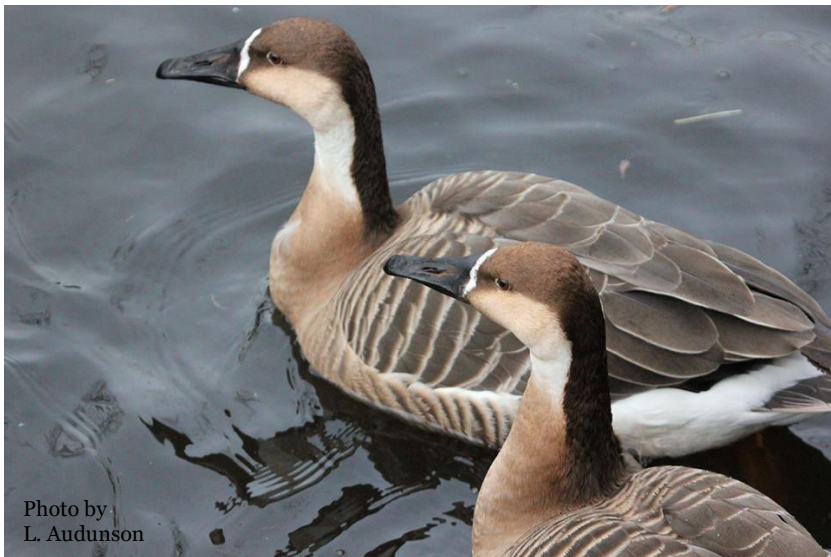
## **Program Goals:**

- Transfer studbook into ZIMS
- Develop husbandry and rearing guidelines
- Assess management strategies for flighted management in aviaries

# Swan Goose

Christine Fuehrmeyer  
Lincoln Park Zoo

- Yellow SSP
- 44.58 (102) at 14 AZA Institutions
- RCP Target population: 110
- IWWA 2016 Survey: 49.56.1 (106)



## Program Goals:

- Increase holding through elimination of domestic goose flocks
- Studbook into ZIMS
- Conservation messaging plan

# Red-breasted Goose

Joanna Klass

Woodland Park Zoo

- Yellow SSP
- 77.66 (143) at 22 AZA Institutions
- RCP Target population: 200
- IWWA 2016 Survey: 197.186.47 (430)



Photo by  
L. Audunson

## Program Goals:

- Support field conservation
- Add new holding institution annually
- Husbandry guidelines

# Nene

William Robles

Audubon Aquarium of the Americas

- Yellow SSP
- 36.34.3 (73) at 19 AZA Institutions
- RCP Target population: 125
- IWWA 2016 Survey: 104.88.24 (216)



## Program Goals:

- Increase population 10% a year for 5 years
- USFWS collaboration
- Conservation messaging

# Trumpeter Swan

Tiffany Mayo

Cleveland Metroparks Zoo

- Yellow SSP
- 38.45.2 (85) at 33 AZA Institutions
- RCP Target population: 110
- IWWA 2016 Survey: 68.87.12 (167)



## Program Goals:

- Genetic analysis of population
- Collaboration with state agencies
- Rehab program for species from Rocky Mountain locale



# African Pygmy Goose

Stephanie Allard, PhD  
National Aquarium

- Yellow SSP
- 52.44.13 (109) at 28 AZA Institutions
- RCP Target population: 150
- IWWA 2016 Survey: 51.45 (96)



Photo by Pinola  
Conservancy

## Program Goals:

- Develop husbandry and hand raising protocols
- Identify more holders
- Analyze morbidity and mortality trends

# White-winged Duck

Dr. Kim Cook

Akron Zoo

- Yellow SSP
- 37.34 (71) at 10 AZA Institutions
- RCP Target population: 100
- IWWA 2016 Survey: 33.38 (71)



## Program Goals:

- Assess the relatedness between the AZA and EAZA populations
- Avian TB studies and report publishing
- Range country partnerships

# Madagascar Teal

Allan Craig Mikel  
Louisville Zoo

- Yellow SSP
- 30.38 (68) at 18 AZA Institutions
- RCP Target population: 75
- IWWA 2016 Survey: 42.46 (88)



Photo by I. Gereg

## Program Goals:

- Develop husbandry populations
- Studbook to ZIMS
- Recruit new holders

# Marbled Teal

R. Harrison Edell

Dallas Zoo

- Yellow SSP
- 153.125.8 (286) at 41 AZA Institutions
- RCP Target population: 275
- IWWA 2016 Survey: 173.149.5 (327)



Photo by  
L. Audunson

## Program Goals:

- Add SSP Vice-Chair
- Develop genetic testing program in collaboration with Mallorcan
- Identify birds for wild release

# Baer's Pochard

Jamie Toste

Minnesota Zoo

- Yellow SSP
- 53.50 (103) at 21 AZA Institutions
- RCP Target population: 150
- IWWA 2016 Survey: 83.85 (168)



Photo by  
L. Audunson

## Program Goals:

- DNA analysis of AZA population
- Work with WWT and EAZA on husbandry and rearing guidelines
- Studbook to ZIMS



# Scaly-sided Merganser

Chuck Cerbini  
Toledo Zoo

- Yellow SSP
- 30.39.12 (81) at 13 AZA Institutions
- RCP Target population: 125
- IWWA 2016 Survey: 61.56 (117)



## Program Goals:

- Develop husbandry guidelines
- Add one new holder annually
- Recruit SSME conservation funders from AZA

# Red Species Survival Plan Programs



# Orinoco Goose

Nancy Nill

Palm Beach Zoo

- Red SSP
- 26.19.1 (46) at 18 AZA Institutions
- RCP Target population: 85
- IWWA 2016 Survey: 64.47.8 (119)



## Program Goals:

- Studbook transition to ZIMS
- Husbandry and rearing guidelines
- Conservation messaging



# Coscoroba Swan

Matt McHale  
Zoo Miami

- Red SSP
- 15.13 (28) at 12 AZA Institutions
- RCP Target population: 75
- IWWA 2016 Survey: 40.32 (72)



## Program Goals:

- Increase population size by 25% annual for five years
- Studbook to ZIMS
- Husbandry and rearing guidelines



# Indian Pygmy Goose

Stephanie Allard, PhD  
National Aquarium

- Red SSP
- 26.21 (47) at 11 AZA Institutions
- RCP Target population: 100
- IWWA 2016 Survey: 19.17 (36)



Photo by Pinola  
Conservancy

## Program Goals:

- Increase population 15% annually for next five years
- Morbidity and mortality analysis
- Husbandry and rearing guidelines

# Candidate Programs



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L. Audunson



# Emperor Goose (Near Threatened)

- Candidate
- 35.29 (64) at 10 AZA Institutions
- IWWA 2016 Survey: 94.99.4 (197)



# Philippine duck (Vulnerable)

- Candidate
- 12.7 (19) at 4 AZA Institutions
- IWWA 2016 Survey: 55.42 (97)



Photo by  
L. Audunson



# Blue-winged Goose (Vulnerable)

- Candidate
- 9.11.1 (21) at 7 AZA Institutions
- IWWA 2016 Survey: 28.26.1 (52)





# Monitored Programs



Photo by  
K.Starr



# Monitored Programs

- Magpie goose
  - 17.23 (40) at 11 AZA
  - IWWA 2016 Survey: 36.35.2 (73)
- Cape shelduck
  - 5.1 (6) at 6 AZA
  - IWWA 2016 Survey: 29.25 (54)



# Monitored Programs

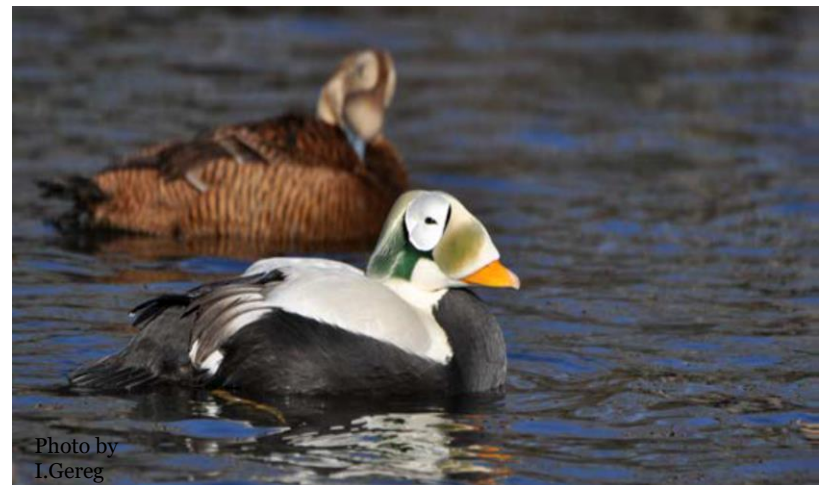
- Hartlaub's duck
  - 14.14 (28) at 5 AZA
  - IWWA 2016 Survey: 21.21.5 (47)
- Falcated duck
  - 33.34 (67) at 16 AZA
  - IWWA 2016 Survey: 108.125.1 (234)





# Monitored Programs

- Laysan duck
  - 33.23.3 (59) at 6 AZA
  - IWWA 2016 Survey: 68.60.31 (131)
- Spectacled Eider
  - 24.29 (53) at 4 AZA
  - IWWA 2016 Survey: 39.40 (79)



# Monitored Programs

- White-headed duck
  - 14.20.2 (36) at 5 AZA
  - IWWA 2016 Survey: 32.3 (35)



# Replacement Chart

Species	Outcome	Zoogeographic Replacement	Non-Zoogeographic Replacement
Northern Spur-winged Goose ( <i>Plectropterus gambensis gambensis</i> )	Not Recommended	Blue-winged Goose, Cape Shelduck,	Coscoroba Swan, Southern Screamer, Hawaiian Goose, Magpie Goose
Southern Spur-winged Goose (Black) ( <i>Plectropterus gambensis niger</i> )	Not Recommended	Blue-winged Goose, Cape Shelduck	Coscoroba Swan, Southern Screamer, Hawaiian Goose, Magpie Goose
Wild Muscovy ( <i>Cairina moschata</i> )	Not Recommended	Orinoco Goose, Coscoroba Swan, Cuban Whistling Duck, Ruddy-headed Goose	Blue-winged Goose, Hawaiian Goose, White-winged Duck
Bronze-winged Duck ( <i>Speculanus specularis</i> )	Not Recommended	Orinoco Goose, Southern Screamer, Ruddy-headed Goose	Blue-winged Goose, Hawaiian Goose, Cape Shelduck
Patagonian Crested Duck ( <i>Lophonetta specularioides specularioides</i> )	Not Recommended	Orinoco Goose, Ruddy-headed Goose, White-faced Whistling Duck, Black-bellied Whistling Duck	Falcated Duck, Philippine Duck, Australian Wood Duck
Green Pygmy Goose ( <i>Nettapus pulchellus</i> )	Not Recommended	None	Indian Pygmy Goose, African Pygmy Goose
Flying Steamer Duck ( <i>Tachyeres patachonicus</i> )	Not Recommended	Coscoroba Swan, Ruddy-headed Goose, Andean Goose	Spectacled Eider, Pacific Common Eider, Cape Shelduck
Meagellanic (Fuegian) Steamer Duck ( <i>Tachyeres pteneres</i> )	Not Recommended	Coscoroba Swan, Ruddy-headed Goose, Andean Goose	Spectacled Eider, Pacific Common Eider, Cape Shelduck
Redhead ( <i>Aythya americana</i> )	Not Recommended	Canvasback, Ringed-neck Duck, Lesser Scaup, Bufflehead, Barrow's Goldeneye	Baer's Pochard, Scaly-sided Merganser, Ferruginous White Eye, White-headed Duck
Tufted Duck ( <i>Aythya fuligula</i> )	Not Recommended	Baer's Pochard, Scaly-sided Merganser, Ferruginous White-eye Duck, White-headed Duck	Canvasback, Ring-necked Duck, Barrow's Goldeneye
Southern Pochard ( <i>Netta erythrophthalma</i> )	Not Recommended	White-headed Duck, Rosy-billed Pochard	Baer's Pochard, Scaly-sided Merganser, Ferruginous White-eye Duck

# TAG Goals

- Sustainability
- Conservation
- Husbandry and Welfare
- Education/Waterfowl Awareness and Program Support





# Sustainability

**Goal #1:** The TAG plans to work with EAZA and other zoological regions to determine which species will be managed multi-regionally and which populations will be a singular program focus within the AZA region.

## **Action Steps:**

- Species prioritization between AZA, EAZA, and IWWA
- Establish new Candidate and Monitor Programs
- Develop new mentoring program

# Sustainability

**Goal #2:** In order to develop and maintain sustainable populations of waterfowl, the Anseriformes TAG will continue to monitor its SSP and Candidate Programs on an annual basis with particular emphasis on providing support and assistance for three challenged populations: Hawaiian (Nene) goose, coscoroba swan, and Indian pygmy goose.

## **Action Steps:**

- Increase Nene goose population by **10%** in the next **five years** to reach **115-120 birds** by **2025**
- Increase coscoroba swan population by **25%** every year for the next **five years** to reach **75-80 birds** by **2025**
- Increase Indian pygmy goose population by **15%** in the next **five years** to reach **95-100 birds** by **2025**

# Husbandry and Welfare

**Goal #1:** The TAG will continue to develop and improve the husbandry standards in AZA as a means to improve long-term population sustainability and ensure the highest quality of welfare for waterfowl.

## **Action Steps:**

- Publish Animal Care Manual for Ducks, Geese, Swans and Screamers
- Conduct national and regional husbandry workshops in partnership with IWWA

# Education and Waterfowl Awareness

**Goal #1:** The TAG will continue to promote waterfowl awareness within the AZA community and among the general public through increased social media presence, implementation of engaging and interactive waterfowl messaging, and the raising of funds to support TAG programs.

## Action Steps:

- Social media presence
- Zoo messaging and environmental stewardship
- TAG Grant Program





# Conservation

**Goal #1:** The TAG will continue to support waterfowl conservation initiatives worldwide with emphasis on threatened and endangered species maintained in AZA. The TAG plans to highlight species of conservation concern and work with the AZA Saving Animals From Extinction (SAFE) program as applicable.

## **Action Steps:**

- Small Grants Programs



# TAG Sponsored Conservation Programs



Photo by  
EAAFP

# AZA In-Situ Conservation Support for Waterfowl

- Red-breasted goose
- Scaly-sided merganser
- Baer's pochard
- Trumpeter swan
- Brazilian merganser
- White-winged duck





# Questions and Comments

