

African Wild Dog SSP Report
2005 AZA National Conference
Chicago, IL

North American Population Analysis

The AZA Canid Taxon Advisory Group has designated a target population size of 130 specimens for this species. The current population size is 91.68 distributed among 30 AZA institutions. Current genetic diversity is 92.8% with 23 founders represented in the current population. The genetic diversity is expected to fall below 90% in the next generation.

Population analysis of the current population will occur at this meeting. Our goal is to provide animals for the nine zoos that wish to join the SSP. Breeding recommendations in 2004 produced 15.8 puppies that survived past 30 days. The number of breeding pairs recommended in 2004 was intended to create and maintain a population size of 130 individuals over the next two years. Due to the large variation in litter sizes of this species (1 to 16 pups), this population should be closely monitored demographically in order to avoid potential space problems and maintain a stable growth rate and age structure. As a result the SSP plans to hold a mid-year meeting each fall.

It is the recommendation of the management group to move same sex siblings as packs rather than individuals whenever possible. Due to space constraints it is essential that we manage the breeding and moves recommended with a strategy to maintain packs of wild dogs in our institutions. Members of the African Wild Dog SSP management group and advisors are available to assist institutions on management and husbandry issues.

Zoos Waiting for Wild Dogs

1. Pittsburgh - Import 2005
2. Columbus
3. Virginia Zoo
4. National Zoo
5. San Antonio
6. The Wilds
7. Tulsa

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8. El Paso
9. Roger Williams

Breeding recommendations 2005 (to date)

1. Lincoln Park Zoo breed 2005 - No
2. The Zoo in Naples breed 2005 - No
3. Denver Zoo breed 2005 - Yes 5.2
4. San Diego Zoo breed 2005 - No
5. Wildlife World Zoo breed 2005 - No
6. Bronx Zoo Breed 2005- Yes 9.6
7. OKC Zoo no recommendation - Yes 1.0 (contraception failure)

Committee

WCMC SSP guidelines no longer require an elected management committee. All interested IR's that would like to participate in general SSP decisions should contact Mike Quick, SSP Coordinator. Current African Wild Dog SSP management group members are:

Bill Savage, Oklahoma City Zoological Park
Lynn Kramer, Denver Zoological Gardens
Randi Myerson, The Toledo Zoo
Bret Sellers, Secretary, Woodland Park Zoological Gardens
Lisa New, Knoxville Zoological Gardens
Mary Burke, Brookfield Zoo
Chris Waldron, Philadelphia Zoo
Andi Kornak, Vice Chair, Binder Park Zoo
Curby Simerson, San Diego Zoo
Sue Lyndaker-Lindsey, Wild Canid Survival & Research Center

International Studbook Keeper - Stephanie Rhodes, Brookfield Zoo

SSP Advisors

Education -Liaison to Committee, Mike Quick, Advisor - Charis Henrie, Education Program Coordinator, Oregon Zoo

- Web page completed <http://www.oregonzoo.org/Africandogs/>

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- Next focus is assisting field projects with educational programs.
- Charis is looking for volunteers to assist with the SSP's education activities.

Veterinary - Liaison to Committee, Mary Burke, Advisor- Dr. Michael Briggs, DVM, African Predator Conservation Research Organization

- Dr. Briggs is working on updates of the Veterinary/Pathology/Reproduction chapters of the husbandry manual.
- Assisted the SSP with vaccine trials and serum survey project reviews
- New contact information for Dr. Briggs:
Michael B. Briggs, DVM, MS
African Predator Conservation Research Organization
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Pathology - Liaison to Committee, Mary Burke, Advisor- Dr. Mike Kinsel/Head of the Pathology program at Brookfield, Lincoln Park and Shedd Aquarium.

Field Conservation - Liaison to Committee, Bret Sellers, Advisor - Dr. Joshua Ginsberg, WCS

- Dr. Ginsberg has assisted the SSP with several field project reviews.

Nutrition - Liaison to Committee, Mary Burke, Advisor-Deb Schmidt/Nutritionist, Lincoln Park.

Small Population manager - Liaison to Committee, Mike Quick, Advisor- Sarah Long/PMC/ Lincoln Park.

- Sarah conducted an import analysis to assist with the future import by the Pittsburgh Zoo.

Reproduction - Liaison to Committee, Randi Myerson, Advisors - Michael Briggs, DVM, African Predator Conservation Research Organization and John K. Critser, Ph.D., University of Missouri

Behavior - Liaison to Committee, Andi Kornak, Advisor - Vacant

- Please refer aggression issues to Mike Quick, SSP coordinator.

Training - Liaison to Committee, Andi Kornak, Advisor - Marty McPhee, Disney's Animal Kingdom.

- Investigating interest in listserv by African wild dog keepers

Action Plan

These are the areas of concern and interest that are used to develop the Three Year Action Plan. Please support these SSP action plan projects

- **Reproduction**

1. **Understanding the Reproductive Biology of the African Wild Dog for Improved Management and Conservation** - Nucharin Songasen, Smithsonian National Park Conservation and Research Center.
 - Link reproductive endocrinology (hormone assays) with corticoid assays. Fecals will need to be collected from 10.10 animals in the SSP population.
 - A behavior questionnaire will be developed to compliment the data gathered from the fecal assays.
 - Semen evaluation and cryopreservation methods will be developed.
 - Post-mortem evaluation of ovaries to study the identifying factors in large litters.
2. **Evaluation of the GNRH Agonist Implant Deslorelin for contraception in Carnivores** - Dr. Cheri Asa, St. Louis Zoological Park
 - The AZA Wildlife Contraception Center is sponsoring a basic research study of the efficacy of the gonadotropin-

releasing hormone (GnRH) agonist deslorelin (Suprelorin®) in implant form.

- Deslorelin effects contraception by temporarily suppressing the reproductive endocrine system, preventing production of pituitary and gonadal hormones.
- Record any signs of estrous behavior, male sexual interest, mounting or copulation.
- Complete the AZA Wildlife Contraception Center's annual Contraception Database Survey, which is distributed in the spring by the Center's Database Manager.
- Monitor suppression via fecal gonadal hormones.

- **Space Issues**

1. **Dynamics of Captive Pack Formation in the African Wild Dog** -

Dr. Kim McCreery and Dr. Robert Robbins, African Wild Dog Conservancy, Tuscon, AZ

- Study the factors affecting aggression in the captive population. The level of aggression seen in captive packs is rarely observed in the wild.
- Video data of interactions between newly formed packs will be collected and analyzed.
- We need greater participation in this important study that may help us in understanding the pack aggression issues we all face.

- **Animal Welfare Issues**

- **Husbandry**

1. **Development of husbandry manual** - SSP

- **Medical Issues**

1. **Immunization and Antibody Persistence to Canine Distemper (and Rabies) Vaccination in captive African Wild Dogs (*Lycaon pictus*)** - Tawnia J. Zollinger, DVM, Kathryn C. Gamble, DVM, MS, DACZM, Robyn Barbiers DVM, Lincoln Park Zoo

- To evaluate vaccination protocols and antibody persistence to canine distemper and rabies vaccination in captive African wild dogs
2. **Immune response of naïve juvenile African wild dogs (*Lycaon pictus*) following vaccination with canine distemper and rabies vaccines** - Cora Singleton, BS, DVM; Rosie Woodroffe, PhD; Linda Munson, DVM, PhD; and Jonna Mazet, DVM, MPVM, PhD.
 - The objective of this study is to determine a safe and effective vaccination protocol for use in captive and free-ranging wild dog populations at high risk for exposure to canine distemper and rabies.
- **Field Conservation**
 1. **Community-based Study of the Conservation Status and Ecology of the African Wild Dog in Southeastern Kenya** - Dr. Kim McCreery and Dr. Robert Robbins, African Wild Dog Conservancy, Tuscon, AZ
 - Collect census data on two endangered mammals of the region: African wild dog and the hirola
 - Train locals in field research techniques.
 - Survey resident population's attitudes towards African wild dogs.
 - Identify the threats to the two endangered populations.
 - Assist the local governments and NGO's with the development of a conservation program.
 2. **Health, Reproduction and Animal Well-being in Reintroduced African Wild Dogs** - Dr. Micaela Szykman, Smithsonian National Park Conservation and Research Center
 - Conduct pre & post reintroduction fecal steroid assessments.
 - Document and evaluate current successful pack formations for future reintroductions.
 - Songasen's research will assist the field element of this study through method development and information evaluation of the captive population.

3. **The Conservation of the Endangered African Wild Dog Outside of Formally Protected Areas** - Dr. Micaela Szykman, Smithsonian National Park Conservation and Research Center
 - Follow and understand the movements of dispersing groups of wild dogs throughout the heterogeneous landscape of different land use regimes in unprotected areas
 - Develop an improved understanding of the spatial attributes of the ecological features, especially in the form of wildlife corridors, necessary for supporting self-sustaining populations of wild dogs, other large carnivores and high biodiversity in general.
 - Pave the way for the trouble-free and successful expansion of African wild dogs throughout an entire province in South Africa by maintaining a consistent network of communication among local community members, private landowners, wildlife managers and conservation scientists to address concerns and problems arising from carnivore range expansion.

4. **Painted Dog Conservation: Rehabilitation Facility** - Gregory Rasmussen, Wildlife Conservation Research Unit, Dept Zoology, Oxford University (project under review)
 - The rehabilitation facility in Zimbabwe caters to African wild dogs during the critical period after serious injury, translocation from hostile regions and orphaned puppies from natural or anthropogenic events until they can be returned to their natal pack or reintroduced to a favourable environment.

5. **Botswana Wild Dog Research Project** - Dr. J.W. (Tico) McNutt, Botswana Predator Conservation Program (project under review)
 - Monitoring of wild dogs in the core study area
 - Biofence project is a multi-year project designed to understand territoriality in wild dogs and what they say to each other through scent dispersal and olfactory receptors.

- Home range - territory analysis data provides an account of the ranging behaviors of neighboring wild dog packs and a clear illustration of pack territorial boundaries.
 - People, Parks and Predator Management Project establish a relationship of communication with the farmers, game ranchers and other resource users in the areas adjacent to the core study area and in the farming areas of the northern Kalahari.
 - Home range, territoriality and conflict in marginal Wild Dog habitats identify the range and extent of predator conflict in these relatively dry habitats with longer-term goals to estimate the wild dog population in the vast marginal habitats of southern and western Botswana.
- **Development of Public Relations and Education**
 1. African Wild Dog SSP Website - Charis Henrie, Oregon Zoo

Husbandry Manual

The husbandry manual (standardized guidelines) is still in development. Chapters of the AZA and EEP husbandry manual are available for SSP participants. Contact Mike Quick

Mike Quick

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