#### SSP's and Rhino Conservation

IR's, IL's, SSP's, MK, RAG, TAG's, SB#'s, ZIMS, XYZ PDQ. What's so confusing about that?

## **A Few Definitions First**

- An SSP (Species Survival Plan) is a program that was started in 1981 to manage species in captivity.
- Specifically, the AZA (Association of Zoos and Aquariums). This is mainly the US, but there are non-US, AZA accredited facilities.
- There are currently 502 SSPs.

# Who is involved?

- IR's and IL's.
- Institutional Representatives (IR's)are determined by the facility. These people are the 'spokespeople' for the species (or, sometimes, the taxon)
- An Institutional Liaison (IL)is usually the boss of the IR at that institution. If the group isn't getting the work out of the IR, they'll contact the IL.

IR's can be voted onto Steering Committees.

## Tags, Rags, Nags—No Really!

- So, who are the groups that these IR's work for?
- Tags are Taxon Advisory Groups. They are the folks who work with a specific group of animals—Antelope, Cervids, Equids.
- The Rag is simply the Rhino Advisory Group.
- Nag? It's the Nutrition Advisory Group.

### OK. Get to the Point.

- The RAG consists of a chair, the SSP Coordinators and the steering committee. There are also a number of advisors that each TAG relies on for specific aspects—education, veterinary, behavioral, genetic, nutritional, etc.
- The main goal is to master plan for the captive populations of rhino in NA, determine research needs, produce the Annual Report and the Regional Collection Plan every 5 years.
- Rhino Research Council—the RAG is very lucky to have this group. Critically important to the development of research needs.

## How to Master Plan. And Why.

- Prior to a meeting, the SSP coordinators contact all holding facilities to find out their wants and needs.
- Every 5 years the RAG publishes an RCP (Regional Collection Plan) which, among other things, provides a space survey. We use this to determine how many spaces are available to each species of rhino.

Then we sit down and hash out the plan.

#### A little about the flow of information

- The SSP coordinator asks the IR for their wants and needs
- If they want breeding animals, the studbook keeper and population biologist will determine best, least related animals
- During master planning, in an ideal world, the SSP coordinator, studbook keeper (sometimes the same person) population biologist and some of the IR's are present
- After planning, a draft version comes out for comment by all IR's prior to final Breeding and Transfer Recommendations coming out

# Plan Hashing 101

- In a perfect world, one zoo wants to place an animal and another zoo wants that animal. That's easy.
- Sometimes zoos need to place animals that other zoos don't need. That's more difficult
- Sometimes zoos want animals that aren't available in the population. That's even more difficult.

# My favorite rhino is leaving!

- OK, the recommendations have come out and the rhino that you've been working with for ten years is slated to go be a breeding bull at another zoo.
- Big Picture—that's a great opportunity for him, for the SSP and for white rhinos.
- A little closer to home—this sucks!
- This SSP has great cooperation amongst it's IR's and facilities.
- The IRKA is great at putting people together and here is a great opportunity to help make that transition smooth and provide great care for him at his new facility.

### What tools do we have?

- Studbooks. These are mandatory for all SSPs, There are more studbooks out there than there are SSPs.
- Studbooks give information on the species, and on each individual in the population.
- Studbook keepers are responsible for all this information.
- SSP coordinators use this information, in conjunction with the PMC (Population Management Center) or SPMAGers (Small Population Managers, now referred to as Adjunct Population Advisors) to make the best choices for which animals should be bred.
- These decisions are made primarily using Mean Kinships (which is a way to quantify the relatedness of individuals in a population based on pedigree).

## Back to the Why

- What's so important about master planning?
- Inbreeding is avoided in the wild by how animals move about. Young animals are kicked out of the herd, sires kill male offspring, older animals can't compete, or they die younger than in captivity, etc.
- We have to artificially provide for that in captivity. Managing small populations is difficult. We have to make sure the genetic diversity stays as high as possible for as long as possible.

### **GOHR** management

ISSUES seen in both the SSP and EEP Foot pad problems (cement floors) Neonatal mortalities (first time births in young females/stillbirths/aborts) Sex ratios/Excess males **Breeding introductions** High transport costs **Conservation project** support for IRV2020

# Rhino Husbandry Manual

- Available to all institutions on line on the International Rhino Foundation web site.
- www.rhinos.org. Go to "our work:, research and publications:, Key Publications:, Rhino Husbandry Manual.
- You can also Google Rhino Husbandry Manual and it takes you right there!

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