

## VIABLE POPULATIONS FOR RHINOS

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One result of note from these preliminary analyses is that a viable number for each separate subpopulation of rhino should perhaps be at least 100 animals. However, this recommendation does not necessarily refer to the actual number of rhinos existing in some defined area, e.g., a sanctuary, of the natural range of the species now. Instead, this guideline for viable size of a subpopulation represents a minimum number that the area or sanctuary must be able to sustain if the rhinos can be protected and hence permitted to grow to the carrying capacity of the habitat.

It must be reiterated that the numbers for viable rhino populations are preliminary and should not be interpreted as definitive prescriptions. Much more population viability analysis is needed to provide the foundation and framework for rhino conservation strategies. However, it seems unlikely that the numbers suggested above for viability will be any lower after further analyses.

It is also worthwhile to observe that sustaining viable population sizes for rhino in the wild also implies maintaining minimum critical areas of natural habitat that can and will accommodate many other species. Megavertebrates like the rhino are both flagship and umbrella species for conservation of many other kinds of wildlife. This function should ameliorate, in part, the concern that investing so much money for the preservation of a few megavertebrates like the rhinos is unjustified while the greater number, and perhaps more important but less charismatic, species may be neglected.

[Editor's Note: In the next issue of *Around the Horn*, Dr. Foose discusses a conservation strategy involving intensive management of wild populations and the inevitable role of captive propagation.]

## ARMSTRONG AID

Over the past two years, 31 white rhinos in North America have been translocated to other SSP participating institutions in accordance with the White Rhino SSP Masterplan. The moves were recommended in order to enhance the breeding of these potential founders.

A special note of thanks goes to the Armstrong Tire and Rubber Company for awarding to the White Rhino SSP a grant of \$50,000 which paid for nearly all of the transportation costs incurred in moving these animals.

The first success of this translocation program occurred with the birth of a female calf at Knoxville on February 2, 1990. The calf's sire had never bred successfully until moved to Knoxville in May, 1988.

## RHINOCERES RESEARCH

By Robert W. Godfrey

When a newsletter for rhinos was first proposed, my initial reaction was one of confusion, since everyone knows that rhinos cannot read. As I thought about it, I realized that the intent was to benefit rhinos, but was aimed at people. It appears that humans are responsible for the current status of rhinos as endangered species. Granted, extinction may be a part of natural selection and evolution, but it usually occurs much slower than what is happening with rhinos. The decrease in rhino populations is definitely a manmade situation. Efforts have been successful in stabilizing the wild population of southern white rhinos, but the remaining species do not appear to be so fortunate. The prospect of maintaining any sizeable wild population looks bleak, so efforts are being made to establish stable captive populations.

In order to establish a viable and productive population in captivity, much more knowledge of the rhino needs to be gained. The best way to acquire this knowledge is through the efforts of researchers and the zoo community. By designating specific areas of research and identifying the major problems to be solved, it will be possible to establish a comprehensive data set on rhinos. Currently there are several areas being investigated by researchers around the country. Projects completed in the past have yielded valuable information about rhinos, and future projects should add to the information already available.

Granted, one of the fastest ways to increase the captive population is by enhancing reproduction. Techniques for increasing the reproductive capability of rhinos are being investigated and will continue to be evaluated in the future. No less important are the areas of nutrition, animal health and genetics. Focusing all of the research efforts on just one of the areas would be inefficient and counterproductive. There are many aspects of these research areas that are inter-related and this needs to be taken into consideration when designing and conducting projects.

As the Rhinoceros Research Coordinator, it will be my responsibility to coordinate all of the research efforts involving rhinos. There needs to be a high level of collaboration and cooperation between the researchers involved and the zoos holding rhinos. Anyone who is interested in conducting research or has a specific project proposal involving rhinos is encouraged to participate in the program. The initial step involves either contacting myself or one of the four SSP species coordinators for rhinos. After the details of a project are worked out, there should be no difficulty in beginning the data collection. I feel confident, based on past results, that future research will provide meaningful information which will be useful in saving the rhino from extinction.