

WHITE RHINOCEROS (*Ceratotherium simum simum*)

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Introduction

Historically, the overall objective of the southern white rhinoceros SSP has been to develop a self-sustaining captive population to reinforce the wild populations in Africa as part of a global strategy. To that end, we have set the goal of preserving 90% of the average heterozygosity obtained from the wild populations for a period of 170-200 years or 10-12 rhinoceros generations. Since there is a continuing need to coordinate the use of the resources available to all of the rhinoceros programs, the southern white rhinoceros population has undergone a gradual reduction over the past several years which would continue until the population was stabilized at approximately 100 animals. In recent months, there has been an active effort to determine the feasibility of further reductions in the North American population, which would provide more resources for the other rhinoceros SSP programs. This further reduction would be appropriate only with the close cooperation of the other regional programs.

Data Table (current through 1 January, 1991)

	Two years ago	One year ago	Current year
Participating institutions	41	40	40
Captive population	58.74	58.70	60.70
# SSP animals managed	132	124	126
# SSP animals not required to meet goals	0	4	4
# animal in non participant collections but desirable to SSP	0	0	0
Total births in SSP	2	3	8
# surviving to one year	2	3	6
# of desired births	2	3	8
# of undesired births	0	0	0
# of deaths of SSP animals	3	3	6
# of imports	0	0	0
# of exports	0	0	0
# of founders w/ represented descendents	36	37	38

Current Population Status

The captive white rhinoceros population is being reduced through attrition, export to other regional programs and by the designation of certain animals as research only. Several non-productive animals have been placed in breeding situations and, in some cases, given reproductive examinations to determine their future value to the SSP.

Demographic Trends

Although reproduction had fallen off during the previous two reporting periods, this trend was due primarily to the disruption caused by the translocation efforts. This year reproduction has increased markedly, but it is still too soon to determine the effectiveness of the translocation program.

The population has remained relatively stable but is aging and will require further analysis, based on the results of the efforts to increase the founder population, before we can determine the efficacy of further reducing the population.

Population Genetics

While the current founder base is probably adequate, the fact that the remaining potential founders are approaching 25-30 years of age means that unless the transfers mentioned above provide sufficient stimuli to induce breeding in the very near future there is little likelihood that the founder base will increase perceptibly.

Research

Although research efforts to date have been sporadic and uncoordinated, there is a very real effort to

identify the primary targets for research investigations at the TAG level. It has been proposed both on the regional level and globally that a number of white rhinoceros be specially designated for reproductive and nutritional research projects.

Short-term Goals for the Upcoming Year

- 1) Complete the space allocation survey and use the results to determine the most effective use of the resources currently allocated to white rhinoceros.
- 2) Assess the recommendations of the Global Captive Action Plan.
- 3) Update the white rhinoceros master plan.