

COORDINATION OF RESEARCH EFFORTS INVOLVING RHINOCEROS IN THE UNITED STATES

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In the wild, the numbers of the five species of rhinoceros are declining. One way to prevent the extinction of these animals will be to increase the size of the captive population. To effectively utilize resources, a combined effort on the part of zoos and research institutions is needed. In order to coordinate research projects involving rhinos, a Rhinoceros Research Coordinator (RRC) has been appointed as recommended by the African Rhino Workshop held in 1986. The role of the RRC is to assist zoos and participating institutions in the organization and coordination of rhino research projects. Several areas of interest (nutrition, reproduction, veterinary) have already been identified and work has begun. Within each area an individual has been designated as the research liaison. All research projects conducted in a specific discipline are brought to the attention of the RRC who then notifies the liaison for that discipline.

Within particular areas there may be further sub-divisions as the research progresses and becomes more specific. Research on reproductive physiology of rhinos will include endocrinology, estrous synchronization, semen collection and preservation, artificial insemination and embryo transfer. Some of these areas have been or are currently being investigated by several researchers. Nutritional studies are being conducted to determine blood and tissue levels of nutrients, relating the results to the overall health of the animals. Comparisons between wild and captive animals have indicated some nutritional deficiencies in the captive population which are now being studied. Determining the genetic composition of the captive and wild populations will be useful when making decisions regarding breeding animals. Identification of animals within a sub-species will be necessary to maintain these sub-species in the population. Genetic analyses can also determine the level of relationship within and between species, which would be useful in some of the reproduction research. Veterinary aspects of the research will be closely involved with all of the other areas. Determining the medical profile of a healthy rhino will be useful for identifying abnormal and disease situations. Veterinary research will involve live animals, as well as samples collected at necropsy. Proposed research projects should be brought to the attention of the RRC in order to keep records of which investigators are working in each area. With proper communication and collaboration it will be possible to pool resources (funds, facilities, personnel and animals) and make progress in the previously identified disciplines. It will be the job of the RRC to assist in bringing together investigators who are interested in a specific area. In this manner, unnecessary duplication of data can be avoided, which will be more efficient, both economically and scientifically.