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- . "Primate Evolution." Department of Anthropology, University of California, Berkeley. November 1967.
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## National Zoological Park

THEODORE H. REED, *Director*



PRACTICING GOOD ANIMAL HUSBANDRY, the National Zoological Park has sought throughout the year to make even better the splendid collection of animals which it now houses. Every effort was made to obtain mates for solitary specimens, and the resultant breeding records have been gratifying. The research program has been broadened, and the educational facilities offered to the public have been increased. The grounds, which for several years were torn up by new construction, have now returned to a green and parklike loveliness. Although unsettled civic conditions existed throughout the spring months, there were no incidents at the Zoo and the number of visitors was only slightly less than last year.

### The Animals

The collection grew through births, gifts, purchases, and exchanges. The aim of the Zoo is to present a wide diversity of fauna and at the same time to build up herds of rare and endangered species whenever possible.

The animal department has been reorganized and is now known as the department of living vertebrates.

### BIRTHS

This has been a most important year for births of rare and seldom-bred animals. In August the black rhinoceroses, Tony and Thelma, produced a fine male baby. Named Dillon in honor of S. Dillon Ripley,

Several research projects are currently being undertaken at the Zoo in addition to the overseas projects in Ceylon.

Among the research projects currently underway are two, in Ceylon, of which the administrator and principal investigator is J. Eisenberg, who departed 10 June to begin a year's residency in that country. The first, initiated in January 1967, is a study of the behavior and ecology of the Ceylonese elephant. Working with Eisenberg on this project are H. K. Buechner, the co-principal investigator, and F. Kurt and G. McKay. The second project is an investigation of the comparative ecology and behavior of Ceylonese primates. Suzanne Ripley is co-principal investigator and G. Manley and N. Muckenhirn are presently working on it.

Other current research projects are:

1. Studies of predatory behavior of the Viverridae (with C. Wemmer).
2. Studies on the social behavior and on the ontogeny of behavior among selected species of caviomorph rodents (with N. Smythe).
3. Studies on the climbing ability of *Microgale* (with J. McAulay).
4. Studies on the hand raising and maturation of *Setifer* and *Tenrec* (with N. Muckenhirn).
5. Studies on the general behavior of *Macaca sylvana* (with W. Dittus).
6. Studies on the learning ability of *Microgale* (with M. Linnet).
7. Studies on the reproductive behavior in *Cannomys badius* (with A. Miller-Baker).
8. Studies on the predatory behavior of *Tenrec*, including filming of selected series (with E. Gould).
9. Studies on thermoregulation in tenrecs (with A. Underhill and B. Myton).
10. Studies on the reproduction and maturation in *Proechimys* (with E. Maliniak).
11. Studies on the reproductive behavior and maturation in the dasyurids (with L. Collins).
12. Studies on the gestation period in the Rodentia, Marsupialia, and Insectivora (with A. Miller-Baker, E. Maliniak, and L. Collins).
13. Studies on the reproductive behavior of *Solenodon paradoxus* (with E. Maliniak).

The following paper originating in the scientific research department was published:

EISENBERG, J. F. "A Comparative Study in Rodent Ethology with Emphasis on Evolution of Social Behavior, Part I." *Proceedings of the U.S. National Museum*, vol. 122, no. 3597, 51 pp.

## Conservation

Wildlife conservation, with special emphasis on species threatened with extinction in the wild state, is a primary consideration in management of the Zoo's collection, in its scientific and educational programs, and in its commitments to national and international conservation activities.

The director was re-elected president of the AAZPA's Wild Animal Propagation Trust, a group that promotes and coordinates the captive breeding of endangered species. Its principal aim is to allocate responsibilities for such species among qualified zoos in order to avoid duplication of effort and neglect of some species, and its specialist committees have had considerable success in arranging inter-zoo exchanges and loans of animals so as to bring pairs of breeding age together. Père David's deer and the golden marmoset are among the species for which the National Zoo has accepted responsibility. A series of cages have been redesigned to provide optimum conditions for an increasing number of the marmosets.

The Zoo has not been successful in obtaining funds to develop the available Smithsonian-owned land at Belmont as a breeding farm. During the year, a friend of the Zoo offered to make private land available for this purpose, providing the necessary facilities and support. A tentative agreement was reached, and it is hoped that the first animals will be transferred to this pilot project shortly.

For the third successive year, the Zoo conducted for the American Association of Zoological Parks and Aquariums the annual census of endangered species. It covers all North American animal collections and provides data essential to coordinated management of these species.

The assistant director was invited to membership in the Survival Service Commission of the International Union for the Conservation of Nature and Natural Resources. This international strategy group seeks to develop and apply specific plans benefiting individual endangered species, chiefly in their native habitats. It is frequently consulted by governments in the planning and administration of wildlife parks and preserves, and also advises the World Wildlife Fund in its grants for wildlife research and preservation. The assistant director met with the group in April at Bariloche, Argentina.

The assistant director continued as chairman of the AAZPA subcommittee on endangered species. One of the most promising developments of the year was Congressional consideration of the Lennon bill (H. R. 11618) which would enable the Secretary of the Interior to regulate importations of endangered wildlife species, as well as their hides and furs, and to regulate interstate traffic in native species protected by state laws. Hearings were held by the House Committee on Merchant



Although our Indian rhinos Tarun and Rajkumari had been living in adjoining cages almost since Raj's arrival as an 8-month-old calf in December 1963, it was felt that she was too young to be introduced to the mature male before this spring. As far as Rajkumari was concerned, it was definitely NOT love at first sight. . . .

. . . but after a week or two, Tarun was obviously transforming into a prince.  
(Photos courtesy *The Washington Post*: Top, Ken Feil, bottom, Arthur Ellis.)



Marine and Fisheries, at which Lee Talbot read a statement by Secretary Ripley endorsing the legislation. Zoo Director Reed also testified for the Wild Animal Propagation Trust, and submitted a statement by William G. Conway (then president of the AAZPA), favoring enactment.

### Information and Education

During fiscal year 1968 the information-education section continued its signing and labeling program, as well as providing editorial and graphic arts services and assistance in planning special Zoo events. The section assisted with press, radio, and television coverage of Zoo activities on more than 77 occasions, and disseminated natural history and Park information by telephone and correspondence. For groups of handicapped children, visiting schools and colleges, personnel from other zoo's and museums, and special guests and dignitaries, 46 guided tours were conducted.

The section also cooperated with the Friends of the National Zoo in a number of projects, principally in training groups of volunteer docents or tour guides.

African black rhino Thelma keeps a watchful eye on her (and the Zoo's) first-born rhinoceros, Dillon, named for Smithsonian Secretary S. Dillon Ripley.

