

restraint, care and management. Candidates should be in a good physical condition in order to work under hard field conditions for seven months. Knowledge of French is highly desirable. Send either scientific proposals or a letter of intent, a curriculum vitae and references to Dr. J.-Christophe Vié, Opération de Sauvetage de Petit Saut, EDF/CNEH, Savoie Technolac, 73373 Le Bourget-du-lac cedex, France. Fax: (33)-79-25-30-09.

Wildlife Biologist. The Diagnostic Laboratory, College of Vet Medicine at Cornell University is seeking a Wildlife Biologist with expertise in wildlife ecology and zoonoses. The successful candidate will collaborate in the design and implementation of efforts to vaccinate wildlife against rabies. The position requires either 1) a DVM licensed to practice in New York State or 2) a Masters degree in wildlife biology or a closely related field and a New York State Animal Health Technician license. Both also require a minimum of 3 years experience in research efforts focusing on the role of wildlife as vectors of diseases of public health and domestic animal concern. Experience in study design, data collection and management, statistical and epidemiological analyses of large data sets, and research proposal preparation is mandatory. Please send resume and cover letter to: ATTN: Dr. Edward Dubovi, Cornell University, NYS College of Vet Medicine, Diagnostic Laboratory, Upper Tower Road, Ithaca, NY 14853. Resumes will be accepted through December 1, 1993.

MEETING ANNOUNCEMENTS

American Association of Veterinary Parasitologists Conference, San Francisco, California, USA, July 10-12, 1994. For more information, contact Dr. S. D. Folz, The Upjohn Company, Dept. 9690-190-40, 7000 Portage Road, Kalamazoo, Michigan 49001.

XXI International Ornithological Congress (IOC), Vienna, Austria, August 21-27, 1994. For more information, contact John E. Cooper, Chairman of Working Group, Professor of Veterinary Medicine, Sokoine University of Agriculture, P.O. Box 3021, Morogoro, Tanzania, East Africa.

MISCELLANEOUS

Report on Dehorning of Black and White Rhinoceroses in Zimbabwe. Following the experimental dehorning exercise carried out on white rhinos (*Ceratotherium simum*) in 1991 in Hwange National Park, only 6 white rhinos have been killed by poachers. The number of rhinos killed per poaching incursion in the Main Camp region of Hwange National Park has dropped from 2.0 in 1990 to 0.5 in 1992, while the number of known incursions has tripled. Behavioural effects of the dehorning have been minimal, with several dehorned males maintaining territory after being dehorned. In 21 months, a total of 17 dehorned rhinos of both species have been killed by poachers in Zimbabwe. Contrast this with the fifty-two horned black rhinos that were known to have been killed between September 1991 and January 1992, in Parks and Wildlife Estate.

Despite the situation in Hwange National Park with white rhinos, black rhinoceros (*Diceros bicornis*) have suffered catastrophic declines due to poaching. These losses were considered unsustainable, especially with no increased commitment by Government to better protection of Wildlife Estate land holding black rhinos. In January, a request was submitted to the Ministry of Environment and Tourism to dehorn as many black rhinos as possible throughout Zimbabwe. During the 3 month delay before permission was granted, over 30 black rhinos are known to have been killed in Matusadona National Park. With such an unsustainable loss rate, dehorning appeared to be the only innovative option open to the Department of National Parks and Wildlife Management.

The first dehorning of black rhinos was carried out in Matusadona National Park, where 17 animals were dehorned (two calves were not dehorned). The population estimate for Matusadona was approximately 150 animals, therefore, the discovery of only 19 animals after 2 weeks of intensive searching sounded alarm bells. The dehorning exercise was continued throughout the Wildlife Estate, including Chizarira National Park, Chirisa Safari Area, Seronga Research Area, the Lower Zambezi Valley, Hwange National Park, Matobo National Park and in several Conservancies in the Lowveld. It soon became apparent that the original estimate of >2,000 black rhinoceros in Zimbabwe was incorrect and that the known numbers were probably 300, with a possible total of 440 animals. This catastrophic decline had occurred despite

"Operation Stronghold," which supported an aggressive anti-poaching policy, resulting in the shooting of over 150 poachers and the arrest of many more.

By March 1993 over 158 black rhinos had been dehorned, with a mortality rate associated with the immobilisation of 0.6%. Over 112 white rhinos have been dehorned (1991/1992 and 1993) with a mortality rate of <2%. As of March 1993 only 11 dehorned black rhinos had been killed by poachers, with three animals dying of natural or undetermined causes. The loss rate of both black and white rhinos following dehorning appears to be sustainable, taking into consideration that over 100 animals were being lost per year prior to the implementation of this programme. Indications now are that very little quality horn is crossing back into Zambia. Cost of dehorning varies from US\$350 to US\$1,800 per animal.

The research programme on white rhinos continues in Hwange National Park, as well as monitoring of dehorned populations elsewhere in the country. Immobilisation of 19 animals in 1992, who were dehorned in 1991, revealed a regrowth rate of 6.7 cm/year for the front horn and 2.9 cm/year for the rear horn. Horn cutting techniques were improved after several white rhinos were noted to have abnormal horn regrowth, although none had their health impaired. The shape of horns was roughly cylindrical after 1 year of horn removal. Dehorning continues in 1993. M. D. Kock, M. Atkinson

Free-ranging Wildlife Capture Experience in Africa. International Wildlife Veterinary Services will host a course on wildlife capture techniques in Harare, Zimbabwe, Africa for 6 to 8 North American or European wildlife professionals during the first week in March 1994. The course will last approximately one week. Course material will concentrate on chemical capture, physical capture techniques, physiology of capture stress, medical management of free-ranging wildlife and safety considerations. Continuing education credits will be available. Instructors will be leaders in this field from Africa, Europe, and North America including Drs. Mike Kock, Pete Morkel, David Jessup and Bill Lance. An additional one day workshop on radio telemetry hosted by Telonics will follow and there will be opportunities to work with professional capture crews in the field. Current estimated costs including airfare and lodging for a minimum of two weeks are approximately \$5,000. If you are interested contact Dr. Rick Clark at IWVS, 1850 North Main Street, Salinas, CA 93906. FAX (408) 626-9458.

Citizen Ambassador Program Visits China. A delegation of veterinary scientists from Australia, New Zealand and the United States will participate in bilateral exchanges with counterparts in China, under the auspices of the Citizen Ambassador Program of People to People International. Dr. Anthony W. English will serve as the Delegation Leader.

The purpose of the delegation is to participate in a series of discussions, seminars and field visits. Their goal is to create opportunities for the establishment of personal and institutional ties that will enhance future scientific collaboration. These exchanges will also have a major impact on joint efforts to increase international understanding, both personally and professionally.

During visits to Beijing, Changchun, Shanghai, Chengdu, and Hong Kong, the delegates will represent a range of disciplines within the field of veterinary science. This includes scientists with a specialization in certain species groups such as pigs, poultry, cattle, and farmed deer. When visiting Chengdu, the capital of Sichuan Province, wildlife conservation specialists will have an opportunity to learn about the giant panda, a denizen of Sichuan. Chengdu boasts one of the most impressive giant panda displays in the world.

Topics of mutual interest and concern include: 1) The structure and organization of production systems for food animals, fiber production, and the supporting laboratory research techniques; 2) Consideration of the major diseases and production-limiting entities within those industries, and the methods adopted for their preservation control; 3) The spectrum of animal and zoonotic diseases; 4) Bioengineering and embryo transfer; 5) The role of traditional Chinese medicine and acupuncture in veterinary practice and livestock management; 6) The status and nature of wildlife conservation activities of such species as the native panda and roe deer in the People's Republic of China; 7) The utilization of species such as deer for the production of velvet antler and musk, camels and yaks for fiber, meat or other products, and water buffalo for draught purposes, meat and milk.

The American sponsor of this delegation, the Citizen Ambassador Program, is one of several People to People International activities. People to People was founded in 1956 by President Dwight D. Eisenhower to improve communications between Americans and the citizens of other countries. President Eisenhower initially assigned the program's management and operation to the U.S. State Department, but when he left office in 1961, the organization was restructured as People to People International, a nonpolitical, private-sector activity. The Citizen Ambassador Program administers professional exchanges involving such disciplines as education, energy, industrial technology, medicine, architecture, law, agriculture, finance, social science, arts and humanities, and the basic sciences.

For more information, contact: Barbara Wagoner, Citizen Ambassador Program, Dwight D. Eisenhower Bldg., Spokane, WA 99202; Tel. No: (509) 534-0430; Fax. No: (509) 534-5245.