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NEWSLETTER



INTERNATIONAL
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PROTECTION
LEAGUE

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Golden Lion marmoset: one of the world's rarest primates
by Kamol Komolphalin

FIRE DESTROYS NEWSLETTER

IPPL apologizes to members and subscribers for the late appearance of this Newsletter. After several weeks of work, the Newsletter was ready to be printed. A fire during the night of 5 March destroyed the printer's shop, and the newsletter text, photographs, and two original drawings by Kamol Komolphalin were burned. The printing company carried no insurance on customers' property in its keeping, and the incident has caused a serious financial loss to IPPL, not to mention the wasted time and energy that had already been expended on preparation and layout of the text.

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India Bans Export of Rhesus Monkeys

On 3 December 1977, India announced that the export of rhesus monkeys [*Macaca mulatta*] would be banned as of 31 March 1978, the end of the fiscal year in the country. The ban appears to have been precipitated by wide publicity in the Indian press about the use of rhesus monkeys in neutron radiation experiments at the U.S. Armed Forces Radiobiology Research Institute (AFRRI) in Bethesda, Maryland. (See "The Radiation Experiments on Monkeys" in this issue.)

In 1955 the government of India earlier banned the export of rhesus monkeys as a consequence of fatalities in overseas shipments and the general concern expressed by animal protection societies. Scientists both within and outside of India protested the ban on the grounds that the rhesus monkey was necessary to the development of a vaccine against polio; and, four months after it had announced the ban, India entered into a new agreement with the United States for the export of rhesus monkeys. Under the agreement the following restrictions were placed on the use of rhesus monkeys: (1) the monkeys were to be used only in medical research and vaccine production, (2) the U.S. Public Health Service was to provide certification that these were the only uses to which the monkeys would be put, and a certificate of use was required for each project, (3) a U.S. National Advisory Committee on Rhesus Monkey Requirements was to be established, and (4) the monkeys were to be used humanely. In the agreement India specifically prohibited the use of rhesus monkeys in atomic blast experiments and space research.

The United States inaugurated the following procedure to be followed by an institution to obtain rhesus monkeys from India. The institution fills out a "Certificate of Need" (as illustrated ...) which it submits along with a description of the proposed research to the Division of Research Resources at the National Institutes of Health (NIH). The Division signs the certificate and forwards it to the U.S. Surgeon-General for signature. The certificate is then returned to the research institution, which sends it to one of two animal importers, Primate Imports, Port Washington, New York, or Primelabs, Farmingdale, New Jersey, which have contracts with animal dealers in India. The importers supply the certificates of need to the Indian government. There are, therefore, several stages at which non-medical or inhumane research proposals can be rejected. Nevertheless, AFRRI was able to obtain rhesus monkeys for its radiation experiments. However, it appears that the Committee did not, in fact, review individual requests for Certificates of Need for compliance with India's conditions of export. In

a letter to IPPL dated 14 February 1978, Dr. Charles McPherson, Chief of the Animal Resources Branch of the Division of Research Resources, National Institutes of Health, and Executive Secretary of the nominal National Advisory Committee on Rhesus Monkey Requirements, stated:

The National Advisory Committee on Rhesus Monkey Requirements was succeeded by the Primate Research Study Section. This activity was transferred to the Division of Research Resources (DRR) in 1964 and was renamed the Primate Research Centers Advisory Committee. At that time, the Chief of the Animal Resources Branch, DRR, was delegated authority to issue the Certificates of Need. The Primate Research Centers Advisory Committee maintains oversight of our primate resource activities, including the Certificate of Need program. It does not, however, review individual requests for Certificates of Need. It is my understanding that prior to 1964 the Committee operated in a similar manner and made general recommendations on operation of the program but did not routinely review all requests for Certificates. A roster of the Primate Research Centers Advisory Committee is enclosed. It generally meets three times a year.

In the late 1950's over 100,000 rhesus monkeys were exported annually from India. However, in recent years India's export quota for rhesus monkeys has been 20,000, which partially reflects the dwindling numbers of the species. The United States has never made an extensive effort to breed the monkeys in captivity; and, as recently as 1973, over 83% of imported rhesus monkeys died or were killed in the year of their arrival in the United States (*Nonhuman Primates*, National Academy of Sciences, Washington, D.C., 1975). At the Sixth Congress of the International Primatological Society (IPS) held in Cambridge, England in 1976, Dr. S. M. Mohnot, a zoologist at the University of Jodhpur and one of IPPL's Indian representatives, directed attention to the reduction in both the geographic range and population numbers of the rhesus monkey and called for a moratorium on its export. Stopping the trade would have permitted a thorough assessment of population numbers throughout India.

The International Primate Protection League learned of the AFRRI experiments involving rhesus monkeys through articles which appeared in the *Guardian* (18 May 1977) and the *Washington Post* (22 June 1977). On 15 July 1977, Shirley McGreal, IPPL Co-Chairwoman, wrote Dr.

NIH-1244
11-67

UNITED STATES
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE - NATIONAL INSTITUTES OF HEALTH

Certificate of Need for Rhesus Monkeys

(For medical research and production of antipoliomyelitis vaccine)

Nº 19936

I HEREBY CERTIFY (1) that the monkeys now being purchased will be used only for medical research or the production of antipoliomyelitis vaccine, previously described, and (2) that they will receive humane treatment for our care.

INSTITUTION PURCHASE ORDER NO. DAMD22-77-M-0005 DATED 01 October 1976 REQUESTING THE PURCHASE OF

Fifty (50) Rhesus Monkeys

(Use quantity both in figures and written out)

RHESUS MONKEYS FOR

THE PERIOD OF 76 Dec 01 TO 77 Oct 01

NAME OF INSTITUTION Walter Reed Army
Institute of Research, Wash. D.C.

SIGNATURE OF AUTHORIZED OFFICIAL
GEORGE H. WYCKOFF, Jr. LTC, VC-

DATE

NAME OF IMPORTER PRIMELABS, INC.
Farmingdale, New Jersey

TITLE OF AUTHORIZED OFFICIAL
Dir, Div Vet Resources, HRAIR

Upon recommendation of the National Advisory Committee on Rhesus Monkey Requirements, the United States Public Health Service certifies to the Government of India, (1) that these Rhesus Monkeys shall be used only for medical research or the production of antipoliomyelitis vaccine, and (2) that regular inspections shall be made as needed to assure humane treatment of these monkeys.

EXECUTIVE SECRETARY OF NATIONAL ADVISORY COMMITTEE

DATE

SURGEON GENERAL, U. S. PUBLIC HEALTH SERVICE

Charles M. McPherson *10/1/76*

NOT VALID UNTIL SIGNED BY OFFICIALS OF U. S. PUBLIC HEALTH SERVICE

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(See instructions on reverse)

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Allan M. Schrier in his capacity as Secretary-General of the International Primatological Society, Chairman of the National Academy of Sciences Primate Committee, and editor of the **Laboratory Primate Newsletter** asking for his assistance in ending the use of rhesus monkeys in radiation experiments. Schrier's response of 5 August was non-committal. A copy of the 15 July McGreal letter was sent by Schrier to Dr. William Mason, president of the International Primatological Society, who failed to respond.

Details of the AFRRI experiments were brought to the attention of both the scientific community and the concerned public in the September 1977 **IPPL Newsletter**, and readers responded to the request to write letters of protest to Congress and the Secretary of Defense. In a typical response, Admiral Monroe, Director of the Defense Nuclear Agency, of which AFRRI is a component, informed Senator Hayakawa of California that the neutron radiation experiments were "essential to the medical support of the Department of Defense" and that, "to the best of our knowledge, the animals experience no pain in the radiation experiments, though some of them die."

IPPL addressed additional correspondence to AFRRI and the Department of Defense seeking an end to the use of rhesus monkeys in the experimentation. No official action was taken by the U.S. government however.

IPPL, therefore, decided to draw the attention of the Indian people to the AFRRI experiments and other possible violations of the 1955 India-United States agreement through a press release sent to all the major newspapers in India. The other violations included trauma studies such as the dipping of ten rhesus monkeys in boiling water (University of Kansas), shooting of ten rhesus monkeys in the face with a Crossman power rifle at a distance of 3 centimeters (University of Chicago), and a study in which 72 rhesus monkeys were slammed in the guts with a cannon impactor moving at 70 miles an hour in simulation of car crashes (University of Michigan). Such apparent violations of the 1955 agreement previously had been publicized in the April 1975 issue of the **IPPL Newsletter**. IPPL appealed to prime Minister Morarji Desai and the government of India "either to ban the export of Rhesus monkeys to the United States or to insist on strict enforcement by the U.S. of India's conditions of export."

Indian newspapers gave the radiation experiments prominent coverage, and Dr. Mohnot received letters of support for an export ban from all over India. On 9 November 1977, the **Times of India** ran the following editorial:

APPALLING CRUELTY

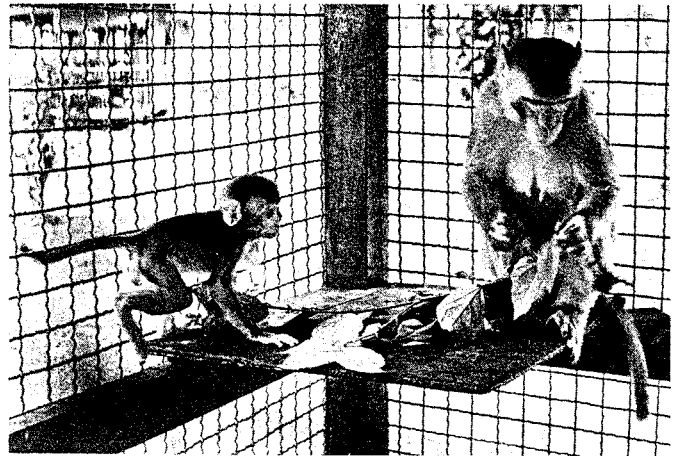
One can get too sentimental about the use of animals, especially monkeys, rabbits, and mice for important biomedical experiments. But the case of the Rhesus monkeys exported from India falls into a different category.

According to the International Primate Protection League, these animals have been subjected to appallingly cruel radiation experiments by military scientists in their diabolical efforts to study the effects of the neutron bomb . . . They wanted to learn how long it would take a monkey to die after a massive dose of radiation, and how many times it would vomit before it doubled up and died.

The details are gory enough and would shock even a half-wit but there is more to this non-research. The monkeys were obtained from this country under false pretenses — in the normal course they were to have been used for research aimed at benefitting humanity, and for preparing polio vaccine. The whole procedure was also illegal because one of the conditions of export was a guarantee by the American companies to give the animals humane care and treatment. New Delhi must take up the matter with Washington and, if necessary, stop further export of Rhesus monkeys.

From 14 to 18 November 1977 the Third National Conference on Animal Welfare was scheduled to take place in New Delhi. Prior to the opening of the Conference, Mrs. Rukmini Devi Arundale, Chairwoman of the Animal Welfare Board, arranged for a meeting between Lady Dowding, Chairwoman of Beauty Without Cruelty, Mr. Jon Evans, President of the International Association against Painful Experiments on Animals, and Shri Morarji Desai, Prime Minister of India. The meeting lasted 40 minutes, and the subject of monkey export was discussed. The Conference was inaugurated on 14 November by Shri Desai, who stated:

Only when Man begins to live a life of truth and non-violence can human society rise to great heights. Man must shun all forms of cruelty — there is no difference between cruelty to animals and cruelty to human beings. It is a shame and source of sorrow that monkeys and other living creatures are being exported from India **Statesman**, 15 November 1977).



Rhesus mother and baby

On 15 November, Dr. S. M. Mohnot drew the attention of the conference organizers to the radiation experiments on monkeys, and the subject was discussed at one of the conference sessions. Following an investigation of the whole matter of monkey export, Shri Desai instructed Mrs. Arundale to announce the export ban on his behalf. On 3 December 1977 the ban was officially announced by Prabhu Dass Patwari, Governor of Tamil Nadu, while inaugurating the 24th International World Vegetarian Congress in Madras.

Meanwhile, in Calcutta on 2 December, Dr. Mohnot spoke on the export and use of rhesus monkeys in radiation experiments and the possibility of an impending export ban at the International Technical Group Meeting on Nonhuman Primates, which was organized by the Zoological Survey of India under the government of India Department of Science and Technology. The meeting was attended by Dr. Benjamin Blood, of the U.S. Interagency Primate Steering Committee, and Dr. G. Bertrand, Director of the Office of International Affairs, Department of the Interior. At the meeting Dr. Bertrand admitted the use of rhesus monkeys in U.S. neutron bomb tests.

In an article in the 20 January 1978 issue of **Science**, the official publication of the American Association for the Advancement of Science, Nicholas Wade raises the question of how the U.S. government found itself "in the position of trampling upon the Indians' known sensitivities about (the export and use of rhesus monkeys)." Wade reports that the National Institutes of Health (NIH) appeared to realize that the neutron experiments violated the 1955 India-United States agreement since, on learning of the publicity about the experiments in the Indian press, NIH asked AFRRI to stop the experiments until the issue of compliance was resolved. Although AFRRI complied with the request, D. W. McIndoe, AFRRI director, defended the experiments, stating that the monkeys were not used in real atomic blasts but "were exposed only to radiation designed to simulate the effects of atomic blasts." As Wade concludes, it appears that India's conditions of export, including the ban on military use of monkeys, "were gradually lost sight of, although the paper work, in genuine bureaucratic tradition, continued to go forward."

AFRRI initially may have obtained rhesus monkeys directly from India, but within the past two years the Institute has obtained its monkeys from the Walter Reed Army Institute of Research (WRAIR) in Washington, D.C. These monkeys probably have been a combination of imported monkeys and some that had been used already in WRAIR experiments. Although an additional Certificate of Need is not required for secondary or subsequent use of rhesus monkeys, this does not mean that the monkeys can be used in any kind of project since the original certificate does not state that nonmedical or inhumane use of monkeys is allowed after initial use. Wade reports that Charles McPherson, the NIH official who administers the Indian rhesus monkey certification program, says "that in his opinion any such second use of Indian rhesus monkeys should fall within the spirit of the (1955) agreement and should not include military use."

continued

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India lifted its original ban on the export of monkeys only with reluctance and under pressure. IPPL considers that exporting countries have the right to place whatever conditions they judge to be appropriate and necessary on the use of primates which they export. However, India's right may be in conflict with U.S. traditions about the use of experimental animals. For example, the U.S. Animal Welfare Act specifically exempts animals from any requirements of humane care that might affect the design of the experiment, and makes no stipulation as to the use of the animals. In agreeing to the conditions imposed on the export of rhesus monkeys by the Indian government in 1955, the United States appeared to have only two options: (1) the use of rhesus monkeys in compliance with the requirements of the Indian government or (2) foregoing the use of Indian rhesus monkeys in experimentation. Whether by accident or design, the United States appears to have come up with a third option: uncontrolled use of rhesus monkeys in spite of certification to the Indian government that usage and treatment comply with the 1955 agreement.

The real paradox of the recent Indian ban is that, if the United States had spent a fraction of the money expended on the development of the neutron bomb and other weapons of warfare on the development of alternatives to the use of live primates in biomedical activities, the depletion of the rhesus monkey in India and the complications resulting

to health delivery systems as a result of the ban might not have occurred.

Note: In a letter to IPPL dated 25 January, 1978, Charles McPherson D.V.M. Chief, Animal Resources Branch, NIH, and Executive Secretary of the National Advisory Committee on Rhesus Monkey Requirements, confirmed that the Committee had approved AFRRI's application to use Rhesus monkeys, but justified approval on the grounds that the research was "essential to the medical support of the Armed Forces" and that it was humanely conducted as defined under the Animal Welfare Act. Colonel Darrell McIndoe, Director of AFRRI, informed IPPL in a 3 February letter that the experiments would be continued using "another species of nonhuman primates or ... Rhesus of non-Indian origin." AFRRI has already used some long-tailed macaques in its experiments. He noted that, "we have not used any Rhesus monkeys from India in any radiation experiments since we were made aware that the Indian government may object to such use."

STOP-PRESS: IPPL has learned that the World Health Organization has spent thousands of dollars telephoning scientists around the world urging them to make "spontaneous" appeals to India to lift the ban. Also, the U.S. Embassy (New Delhi) is putting pressure on the Indian Ministries of Commerce and Agriculture as the 31 March deadline approaches.

The Radiation Experiments On Monkeys

United Action for Animals of New York has provided IPPL with its summaries of radiation experiments on monkeys conducted from 1966 to the present day at the Armed Forces Institute of Radiobiology (AFRRI), Brooks Air Force Base, and the Lovelace Foundation. All the research is funded by the Defense Nuclear Agency, a branch of the Department of Defense. Rhesus monkeys are used as test subjects. Some examples of the experiments follow:

1966 AFRRI. 131 monkeys. Irradiated with gamma-neutron radiation at doses from 2500 to 80,000 rads by 2 Air Force researchers, one a veterinarian. Monkeys then released into individual cages for testing and observation. Equipment used to test animals' responses included a rounded wood prod, electrified metal prod, and electrified grid floor, "a commercial design specifically for this type of animal stimulation." Responses of monkeys to radiation injury were: extreme forward slumping in a crouching posture; whole body convulsions; spasticity; rolling eyeballs; stumbling and falling; "blind, apathetic" facial expression; muscular tremors; vomiting and retching; frequent shifts of body position and posture "as though in great discomfort;" "wild, purposeless twisting, twirling and throwing of the body;" uncoordinated "leaps" upon hearing a sound; stiff-legged walking; "crawling and frantic pushing and scraping" of sides, back and belly on the floor of cage; and "passive draping of the head over the back while in an awkward crouched, clinging posture." (AD 631 661 Feb. 1966)

1968 AFRRI. 85 monkeys. Used to calculate LD 50/60 (dose of radiation required to kill 50% of the animals within 60 days). 7 different levels of gamma-neutron radiation doses used (400-650 rads). Monkeys in one exposure group "were in the restraining chairs for over 2 hours because of technical difficulties. These animals were excluded from the experiment since the added stress to which they were subjected probably influenced their response." Average survival time for all animals was 13.9 days. The LD50/60 was calculated to be 375 rads. Within 2 hours of exposure, 79% of all irradiated monkeys vomited. Diarrhea occurred in 85% and "hemorrhagic" (bleeding) diarrhea in 75% of the monkeys that died. Other signs of radiation sickness were abdominal pains, "malaise", hair loss, and swelling of the face and

neck. Injuries found at autopsy included bleeding in "most organs and tissues," pneumonia, peritonitis, lung and intestinal adhesions, ulcers of the large intestine, and blood-engorged kidneys. A clot was found in the vessels of the heart of one monkey "which died suddenly while chewing an apple." The LD50/60 was "not significantly different" from that reported by another experimenter in 1966. "The clinical responses were typical of those reported by others." (AD 682 903 June 1968)

1968 BROOKS AFB. 18 monkeys. Trained for 4 months in "restraint" chairs to avoid electric shock by operating various levers. Divided into 3 groups and exposed to 2500, 3750, and 5000 rads gamma-neutron radiation. Postexposure testing showed a drop in performance "efficiency" in all groups. Within several minutes after irradiation, some monkeys "became increasingly apathetic and a general paucity of movement became apparent. Animals which showed the most extreme degrees of decrement [inability to avoid shock] slumped motionless in the chair with their eyes closed, and made occasional but feeble, ineffectual attempts to reach and manipulate the performance levers." A few animals vomited "in spite of the fact that all of the animals had been fasted for 16 hours prior to irradiation." (AD 680 746 Sept. 1968)

1969 AFRRI. 6 monkeys. Trained to avoid electric shock by passing through maze and solving visual choice problems in shuttlebox. Then irradiated with 4000 rads gamma-neutron radiation. Animals tested postexposure for 2 hours on visual choice problem, then tested in maze at 4-hour intervals for 4 days. "If the subject [monkey] was alive at this time, behavioral testing was continued on a daily basis." One monkey tried to avoid

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1975 AFRI. 129 monkeys. Trained on "visual discrimination" task. Starved for 18 hours, then exposed to gamma-neutron radiation at seven dose levels from 700 to 5600 rads. Observed for 2 hours postirradiation for vomiting. "Unusual swallowing or non-productive retching were not deemed to constitute emesis" (vomiting). In all dose groups "most of the vomiting occurred in the 20-50 min. interval postirradiation." Comparison of vomiting behavioral results "indicates a probable relationship between emesis and behavioral incapacitation." Results from the lowest two dose groups support previous findings." (Aviation Space Environ. Med. 46(2) Feb. 1975)

1976 AFRI. 10 monkeys. Starved for 18 hours, then trained to run on a treadmill for 2 hours per day for 8 weeks. If the monkeys did not rotate the wheel at or above 1 mph, they were electric shocked. Following training, monkeys placed in individual "squeeze" boxes and exposed to 4600 rads gamma-neutron radiation. 5 seconds after exposure, animals tested again for shock-

avoidance ability on treadmill. Initial testing after irradiation lasted 6 hours; monkeys then tested for 2 hours each day "until death". 4 monkeys vomited. Within about 5 minutes postexposure, "incapacitation" (inability to avoid shock) occurred in 80% of the animals. At 24 hours postexposure, 90% were incapacitated. "Survival times ranged from 7 to 132 hours with a mean survival time of 37 hours." (AD A033 513 Aug. 1976)

1977 AFRI. ONGOING EXPERIMENTS. Unstated number of monkeys being used to observe the effect of gamma-neutron radiation on behavior of "unrestrained" monkeys. Animals are being trained on "activity wheel", using "cued avoidance" techniques—in which animals must try to avoid painful electric shock. Both visual and auditory stimuli—a light and a tone—signal start of task. "After meeting required performance criteria, performance [of monkeys on activity wheel] will be evaluated following exposure to supralethal [more than enough to kill] whole body radiation." (SSIE No. ZOP-90040-3, August 8, 1977)

Copies of United Action for Animals' pamphlet on the radiation experiments are available from UAA, 205 East 42nd St. New York, N.Y. 10017. Up to 3 copies will be sent free: additional copies cost 5 cents each.

Bangla Dosh to Export Monkeys

According to the Washington Post (26 January 1978), Bangla Dosh will permit the immediate export of 3,000 Rhesus monkeys. The supplier will be Mol Enterprises, an Oregon animal dealership run by Dr. Matthew Mayberry, an assistant professor at the University of Oregon Medical School. Dr. Mayberry claimed that he could provide cheaper Rhesus monkeys than India did in the past. In return for providing these cheap monkeys, Bangla Dosh would receive the "benefit" of "establishment of breeding farms . . . and the training of local people in the trade."

Rhesus monkey populations in Bangla Dosh have been declining in recent years. A survey of the country's primates was performed in 1976 by Dr. Ken Green of the National Zoological Park, Washington, USA. In an article in the *Laboratory Primate Newsletter* (Vol. 16, no. 4), Dr. Green stated:

A major surprise of this survey confirmed by interviews with local people is the low numbers of primates. The paucity of *Macaca mulatta* (Rhesus macaque) populations in all habitats is noteworthy.

Dr. Green concluded that:

caution is urged when considering Bangla Dosh as a primate supply source for the biomedical and research community. If there is no guarantee that such endeavors will concomitantly include long-term scientific evaluation of the effects upon primate population dynamics, such exploitation should not proceed.

On 12 April, 1977, Dr. Zakir Husain, IPPL's Representative in Bangla Dosh, requested IPPL's help in getting the Bangla Dosh population of

Rhesus macaques added to the U.S. Endangered List in the category "Threatened" since, "if export goes on for a few more years, we shall reach the point of no return." The Department of the Interior took no action however. The Rhesus macaque is listed on Appendix II of the Convention on International Trade in Endangered Species, and importation to the United States without an appropriate Bangla Dosh export permit is forbidden. According to Article IV of the Convention:

An export permit shall only be granted when the following conditions have been met: (1) a Scientific Authority of the State of export has advised that such export will not be detrimental to the survival of the species.

The U.S. Regulations to implement the Convention are more specific. Section 23(1) requires that shipments of wildlife from non-Convention countries be accompanied by export permits containing the following wording or its equivalent:

I (signing official) hereby certify that the shipment . . . will not be detrimental to the survival of the species in the wild . . .

It is not clear how the Government of Bangla Dosh could issue such a permit based on available evidence about the country's declining Rhesus monkey populations. In such circumstances, entry of Bangla Dosh Rhesus monkeys to the United States at this time is of doubtful legality.

Nonetheless, the *Post* reported that the National Institutes of Health (NIH) would begin immediate negotiations with Dr. Mayberry. According to Dr. Robert Whitney, chief of Veterinary Services at NIH, "We want the monkeys from wherever we can get them."

"Zoo Primate Babies Report" Still Available

Copies of IPPL's December 1977 Report on "Zoo Primate Babies of 1977" are still available. The Report has received many favorable comments from readers, especially those with children in their families. Copies of the report are available at \$1 each or \$0.75 per copy for orders of 5 or more copies.

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shock in the shuttlebox by sitting on the hardened skin on sides of buttocks. Two monkeys vomited within 2 hours postirradiation, and all were unable to eat. Monkeys survived an average of 103 hours after radiation exposure. Experimenters noted that survival time was greater than that reported in previous experiments on "restrained" monkeys and suggested that "forced physical activity" (by electric-shocking) may have enabled the monkeys to live longer. Results indicated that when exposed to 4000 rads radiation, "unrestrained monkeys can be expected to demonstrate a significant decrement in the performance of a learned task." (AD 690 879 Aug. 1969)

1969 AFRRI. 6 monkeys. Trained to avoid electric shock by completing tasks in "shuttlebox." Placed in "restraining device" and irradiated with 4000 rads gamma-neutron radiation. Then tested again in shuttlebox for 8 hours. One monkey died within an hour. Of the five surviving animals, one showed "stress" within 2 minutes postirradiation and vomited after 43 minutes. This monkey "made no attempt to complete the problems" but still tried to avoid electric shock by sitting on its "ischial callosities" (hardened skin on sides of buttocks). Another monkey lay on the electrified grid floor reacting "involuntarily" to the shock and was also observed sitting in a "huddled position, frequently rubbing its eyes." A third monkey vomited 6 times within 35 minutes after exposure and later "appeared to collapse after each response." Another monkey was incapacitated for 37 minutes and lay on the grid floor making "only involuntary . . . movements to the electrical shock, after which it made several unsuccessful attempts to resume a sitting position." He later assumed a "crouched position" and failed to perform at all. The fifth monkey lay down and sat up only when shocked by the experimenters. "The results . . . support previously reported behavioral data for monkeys receiving 4200 rads . . . of pulsed radiation . . ." (AD 698 480 Sept. 1969)

1970 AFRRI. 7 monkeys. Trained to avoid electric shock by pressing one of two illuminated "keys". After 600 training trials, exposed to 15,000 rads of gamma-neutron radiation, then tested again for ability to avoid shock at one hour intervals "until death." Survival times ranged from 34 minutes to 3 hours and 20 minutes. Signs of radiation damage included "random movement of the head and limbs, nystagmus [rolling eyeballs], pupillary dilatation, vocalization [crying out] and body movements in response to the electric shock." Symptoms were similar for all animals and "nothing was observed which has not been previously reported for monkeys exposed to supralethal doses of radiation" (more than enough to kill). (AD 712 054 June 1970)

1971 AFRRI. 71 monkeys. Trained by shock-avoidance to perform "visual discrimination problem". Then irradiated with doses of 2500, 4500, or 10,000 rads gamma-neutron radiation "to determine whether the relationship between head irradiation and the occurrence of incapacitation in monkeys is similar to that observed for pigs and dogs." Within each dose group, some animals were head-shielded, some trunk-shielded, some not shielded at

all. Within 2 hours postexposure, all except 6 monkeys had difficulty avoiding electric shock. "Average performance and numbers of subjects performing at acceptable levels remained low for the entire 2-hour test period in all groups except the head-shielded and trunk-shielded groups that received 4500 rads." The results "indicate that both head and trunk structures are implicated in the early incapacitation that occurs after irradiation of trained monkeys." (Aerospace Med. 42(5), May 1971)

1972 AFRRI. 8 monkeys. Trained to maintain a horizontal position while restrained in a "primate equilibrium platform" (PEP) by manipulating a "joy stick". Deviation from horizontal punished by electric shock delivered to feet. Animals then irradiated with 2400-2900 rads gamma-neutron radiation for 2 hours while operating PEP. Then retested for 30 minutes every 2 hours for 21 hours. 6 animals "exhibited severe performance decrements [inability to avoid shock] followed by variable performance for the duration of the continuous 2-hour test period." Some animals showed no decrement "until shortly prior to death" while others entered a "permanent state of severe . . . incapacitation soon after irradiation." Results were "consistent with recent data" showing that neutron radiation is less "effective" than gamma radiation in causing early incapacitation in monkeys. (AD 759 016 Aug. 1972)

1973 AFRRI. 88 monkeys. Trained to avoid electric shock by operating a "pressplate." Then starved for "at least" 18 hours and exposed to gamma-neutron radiation at doses from 1100 to 15,200 rads. Next, tested at various intervals until death for their ability to avoid shock. "For some subjects, the decline [in ability to avoid shock] was so severe that the animals appeared comatose." After the initial drop in performance level, most animals partially regained their ability to perform. "Performance was generally maintained at recovery levels until shortly before death," when all animals became incapacitated. First signs of radiation injury ranged from disorientation to coma. Vomiting was seen in 30% of the monkeys and may have occurred in more, but "the monkeys' ability to retain vomitus in their cheek pouches could preclude detection . . ." Experimenters concluded that "both the incidence and severity of behavioral impairment following radiation in the supralethal range [more than enough to kill] are dose dependent." (AD 759 340 Jan. 1973)

1974 AFRRI. 129 monkeys. Trained to solve visual choice problem. Starved for 18 hours, then exposed to 763-5258 rads gamma-neutron radiation of the head. Animals observed for vomiting for 2 hours after exposure. Criteria for vomiting "required that the monkey regurgitate substance from his mouth . . . Unusual swallowing or nonproductive retching was not deemed to constitute emesis" (vomiting). Below 2000 rads, vomiting seen "as early as 4 minutes after exposure." At all doses, "most of the vomiting occurred in the 20- to 50-minute interval" following irradiation. Experimenters said that "emesis episodes and severe degradation of performance after exposure to supralethal doses of radiation [more than enough to kill] may be in some way related." (AD A011 045 Oct. 1974)

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Primates Killed in World Wildlife Fund Project

IPPL has learned that primates are being killed as part of a World Wildlife Fund project in the Krau Game Reserve, Malaysia.

The information was provided by Mr. Peter Jackson, Director of Information for WWF, who informed IPPL in a letter dated 16 January 1978 that:

(David Chivers) has been funded partly by the World Wildlife Fund to survey the fauna and flora of the Krau Game Reserve and to formulate a management plan on behalf of the Game Department. This includes collection of primates for anatomical study.

In a subsequent letter dated 3 January 1978, Mr. Jackson informed IPPL that:

My reference to collection of some primates for anatomical study certainly implies that specimens would be killed, but this would be on a limited scale for necessary ecological research.

IPPL has learned that primate species involved are siamangs and gibbons (*Hylobates* spp.), leaf-monkeys (*Presthytis* spp.) and macaques (*Macaca* spp.)

Although in the past some researchers have resorted to collecting primates in order to study diet through analysis of stomach contents, the current trend in ecological research involves detailed observation of feeding behavior in terms of time and energy expended by the different age-sex classes of a primate group and careful monitoring of the vegetation (and other food items) on which primates feed. Since primates are basically vegetarian, with such specializations as fruit-eating (frugivory) and leaf-eating (folivory), increasing efforts are being made to determine the nutritional value and, especially, the secondary

by-products such as alkaloids in the specific parts of trees, and even the individual trees within a forest, on which primates subsist. Stomach contents do not provide this kind of information and, therefore, yield delimited information about both feeding behavior and ecological adaptation.

In addition, as Richard W. Thorington and Colin P. Groves stated in 1969 at a conference on Old World monkeys sponsored by the Wenner-Gren Foundation for Anthropological Research:

(collection) is hardly compatible with the aims of wildlife protection; nor is it a good example to local hunters who are liable to imprisonment for "poaching" — for what they may well regard as legitimate reasons.

Under the Laws of Malaysia, Act 76, Protection of Wildlife Act, 1972, killing of Totally Protected Animals (which include gibbons and siamangs) is punishable by a fine not to exceed \$4,000 (Malayan) or a term of imprisonment not to exceed 3 years or both. Extra penalties are prescribed for killing any wildlife in a Game Reserve. IPPL believes that this law is a wise one and should apply to all. If exceptions are made for scientists for allegedly "necessary" research, then it is likely that local people might seek exemptions from the law and claim the right to kill animals for "necessary" protein. A "double standard" in such matters breeds contempt for the law in those who must live by it. Scientists should, in fact, set a good example of respect for the laws of the countries in which they study.

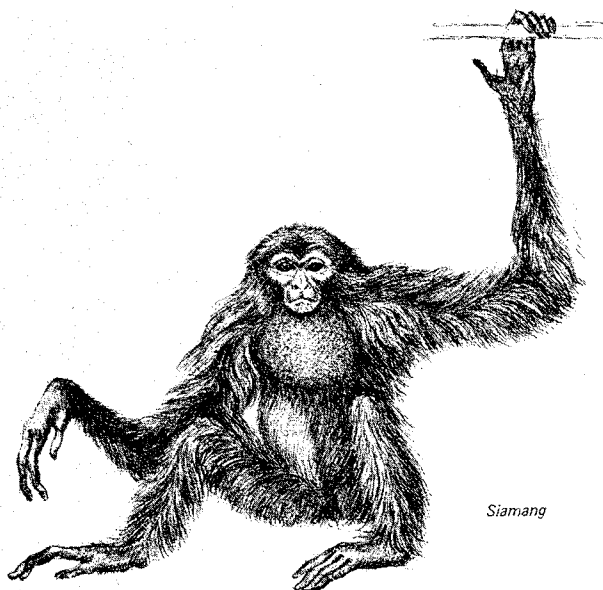
IPPL finds it incongruous that the World Wildlife Fund should sponsor collecting, especially in a Game Sanctuary, and suggests that the primary result of such collecting may be to increase poaching in the Krau Reserve. Another result might be loss of contributions to the Fund's projects by people who object to its sponsorship of projects which involve killing of protected wildlife in protected habitats.

STOP PRESS: THE WORLD WILDLIFE FUND, NOTING CRITICISM FROM CONSERVATIONISTS, HAS INSTRUCTED DR. CHIVERS TO REFRAIN FROM CONTINUED COLLECTION OF PRIMATES FOR ANATOMICAL RESEARCH, NOTING THAT, "THERE IS NO EVIDENCE THAT THE COLLECTION OF PRIMATES IS NECESSARY FOR THE FORMULATION OF A MANAGEMENT PLAN."

Gibbon Colony Proposed For Malaysia

The February 1977 issue of the IPPL Newsletter reported that large sums of money were being offered by the U.S. National Institutes of Health (NIH) to establish breeding colonies of gibbons in Indonesia and Thailand for the purpose of producing infants to be exported for biomedical research in the United States. Both Thailand and Indonesia were unwilling to modify their policies of total legal protection for gibbons, and, therefore, neither country agreed to the establishment of the breeding colonies.

In September 1977 IPPL received several letters from Malaysian members which suggest that NIH is also attempting to establish a gibbon breeding colony in Malaysia through the auspices of Dr. David Chivers of the Department of Anatomy, Cambridge University, England. In a document entitled *Conservation of Gibbons in West Malaysia*, dated 17 October 1976, Dr. Chivers states that two "urgent priorities" of gibbon conservation in Malaysia are: (a) a survey to establish the distribution and population densities of gibbons and siamangs throughout peninsular Malaysia and (b) "to rescue about 100 gibbons of each of . . . three species (preferably in family groups) from certain death in areas where forest is being clear-felled." The three species are the white-handed gibbon (*Hylobates lar*), agile gibbon (*Hylobates agilis*), and siamang (*Hylobates* [= *Symphalangus*] *syndactylus*), and approximately 100 of each species would be placed in colonies "to provide a stock of captive animals (for conservation and biomedical purposes)." An attached budget calls for the expenditure of US\$607,250 for both gibbons and unspecified monkeys over a five-year period although it is specifically mentioned that "preliminary work could take 3 years" and the budget estimated for this shorter period is US\$442,750. It is not clear how the project would be funded after the first three or five years or what would become of the gibbons and siamangs should no funds be forthcoming.



Siamang
by Komol Komolphalin

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Two other sets of documents suggest that the plans for the gibbon breeding colony developed into plans to establish a Malaysian Primate Research Center, which Dr. Chivers describes as a cooperative effort between the Government of West Malaysia and Cambridge University. In a "Draft agreement", dated 24 May 1977, Dr. Chivers identifies the objectives of the Primate Center as including the delimitation of the geographic and habitat distribution of all Malaysian primates and the establishment of "breeding stations and managed reserve areas of (sic) those species that are of use for scientific research." In respect to the latter, priority will be given to the production of primates "considered to be endangered and/or of **greatest importance for research purposes**". Likewise in a "Draft proposals" (sic), dated June 1977, Dr. Chivers specifies that the two aims of the Research Centre will be (1) to collect information on the distribution, numbers, and socio-ecology of primates in peninsular Malaysia and (2) "to develop studies of primates in captivity, with a view to understanding all aspects of primate biology, especially of breeding, for purposes of conservation and **biomedical research**". In the June 1977 document Dr. Chivers appears to suggest that gibbons are necessary or useful to study of such diseases as leukemia, dengue, cholera, malaria, and dysentery. The accompanying table of the history of gibbons maintained by the U.S. Army SEATO Medical Research Laboratory (SMRL) in Bangkok does not bear out the contention that the gibbon is a useful laboratory animal however. Nor is the species easy to breed in captivity as only 35 births occurred in the colony's 12-year existence. The June 1977 document also states that the "University of Cambridge will provide funds and technical assistance as required for the purposes of conserving and breeding Malayan primates, **especially gibbons**" and that "Once breeding successes are achieved thought should be given to the **commercial opportunities** of exporting surplus animals overseas to destinations specialising in biomedical studies of special import".

TABLE I
Summary of Disposition of Gibbons
By SEATO Medical Research Laboratory,
Bangkok, Thailand

Total acquisitions: 273. Remaining at SEATO: 7. Source of gibbons: mainly animal dealers

Number	Disposition
20	Shipped to Delta Primate Center in May 1963 — All but 1 known dead, remaining gibbon probably dead
14	Released on Khao Khiew Island in 1967 and 1968, several died on island, survivors returned to laboratory
11	Shipped to Comparative Oncology Laboratory, University of California at Davis, in August 1973
5	Shipped to U.S. Air Force Survival Training Center in 1971: three died, survivors transferred to U.S. Navy Jungle Survival School at Subic Bay, Philippines.
4	Released in Khao Yai National Park in 1968, fate unknown
5	Donated to Thai Forestry Department
2	Issued to Ramathibodi Hospital for use by Dr. J. M. Telford of Cornell University
66	Died of medical problems (e.g. depression, refusal to eat, parasitism or found dead in cage of unknown causes).
105	Died or sacrificed in association with research projects
1	TB, euthanized
31	Released in Thai military reservation near Kanchanaburi

Table based on information supplied by H. Segal, M.D. Director, SEATO Medical Research Laboratory

IPPL feels that other aspects of the proposed Malaysian Primate Research Centre deserve special scrutiny. In the "Draft agreement" of 24 May 1977, Dr. Chivers specifies the obligations of the Malaysian government and Cambridge University and some joint obligations. Cambridge University would provide, for example, technical advice by staff and consultants, some field and laboratory equipment, and training fellowships for professional and technical personnel. The Government of Malaysia, in contrast, would provide "premises, equipment, supplies, professional and auxiliary personnel, other facilities for field and administrative activities, and operating and incidental expenditures for the execution of the program" (sic) and "Office(s), equipped and with secretarial services, **where overseas consultants can perform their official functions**". The joint obligations specify that the Malaysian government and Cambridge University would agree to supply all primates for biomedical research through the primate research program and "All requests for the supply of non-human primates, coming from the country or from abroad, shall be

routed in accordance with the terms of this agreement; such requests shall be processed by the Government, with technical advice from local and **foreign** consultants".

The source of funds for the Malaysian Primate Research Centre is unclear in the draft documents. In initial correspondence between IPPL and Cambridge University, Mr. G. B. Skelsey, Assistant to the Vice-Chancellor of Cambridge University, informed IPPL in a letter dated 5 October 1977 that "The University is not planning any such research center and is not providing funds for it either directly or indirectly" and that "no member of staff has been authorized to conduct negotiations on the University's behalf." IPPL has learned, however, from reliable sources that the U.S. National Institutes of Health (NIH) will be the source of the funds.

As in the case of the NIH-generated proposals to establish a gibbon breeding colony in Thailand, several separate projects seem to be combined into one: captive breeding, biomedical research, and a variety of field studies. IPPL cannot endorse so-called conservation programs in which the money for necessary field activities appears to be contingent upon making primates available for biomedical research. In the draft documents no funds are proposed, however, for hiring of extra game wardens or the purchase of anti-poaching equipment and boundary-marking materials although these items are given high priority by the conservation departments of several Southeast Asian countries.

"Rescued" gibbons, that is animals that might be captured in forests subjected to clear-felling, appear to constitute a separate problem. It may be significant that the draft documents prepared by Dr. Chivers fail to state how such gibbons and siamangs might be caught. The traditional method of capture is to shoot a mother in order to obtain her clinging infant. Since both gibbons and siamangs live high in the trees and are extremely active as well as relatively small in size, such a method can lead to the deaths of several mothers for each infant that survives the shooting and subsequent fall from the trees. The U.S. Army SMRL in Bangkok tried to capture adult gibbons with a dart gun. The attempt was abandoned after the deaths of several gibbons.

The problems of darting primates are also well illustrated by the difficulties encountered in Liberia by the New York Blood Center in capturing chimpanzees, which provide a larger and less mobile target than gibbons and siamangs. According to a report submitted to the International Union for the Conservation of Nature (IUCN) in April 1975:

Darted chimps have died from heart failure and pierced lungs, and one lost an eye. Darted chimps tend to escape up trees, where they become anesthetized and fall to the ground, and many have sustained fatal injuries this way.

As a consequence of the above problems, the Blood Center reportedly turned to the purchase of chimpanzees from native hunters as its major source of supply.

With money allocated to the Malaysian Primate Research Centre for the acquisition and maintenance of captive gibbons and siamangs, it is likely that, one way or another, the animals will be obtained. One can anticipate that the animal dealers of Southeast Asia will be anxious to provide the primates. Even under the best of circumstances, losses, and, therefore, replacement of, animals in captivity will be inevitable, as the U.S. Army experience indicates, and this would provide another opportunity for the animal dealers to take advantage of the program.

Under the Government of Malaysia's Protection of Wildlife Act of 1972, both gibbons and siamangs are defined as "totally protected animals." Hunting, taking, and possession of such animals is illegal and punishable by heavy fines and prison sentences up to three years. IPPL hopes that Malaysia will be able to withstand outside pressure and inducements to make exceptions to the law that would make protected gibbons and siamangs available for biomedical research as part of a "conservation" project.

New Membership Fees

Beginning on 1 May 1978, IPPL will be forced to raise its membership fees. The previous fees are no longer sufficient to cover the costs of producing and mailing the Newsletters as well as the many other expenses involved in the day to day activities of the League. IPPL is a tax-exempt organization and U.S. membership fees are tax-deductible. The following categories of membership will be available:

Patron	\$100.00 or £50
Sustaining member	\$ 25.00 or £15
Regular member	\$ 10.00 or £ 5
Student member	\$ 5.00 or £ 2

Members may renew at the old rates until 30 April 1978.

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Baboons to be Killed in Car Crash Experiments

The Highway Safety Institute (HSRI), University of Michigan, Ann Arbor, Michigan, USA, has recently purchased 7 baboons for use in car-crash tests. The HSRI was founded in 1966 for the purpose of improving transportation safety. Its Director is Robert Hess, who holds a doctorate in Engineering Mechanics. Most of the research at the Institute is sponsored either by the Motor Vehicle Manufacturers' Association or the National Highway Traffic Safety Administration, Department of Transportation.

The HSRI has been performing car-crash experiments on primates over a period of several years. The *Journal of Trauma* (Vol. 13, no. 11) reported a 1972 experiment at the Institute in which 72 Rhesus monkeys, 10 baboons, and 3 squirrel monkeys were slammed in the guts with a cannon impactor moving at 70 miles an hour. The purpose of the experiment was to study "blunt abdominal trauma."

In June 1975, the Unit for Laboratory Animal Medicine of the University of Michigan placed an order with the Primate Imports Corporation for 2 baboons for use in car-crash tests at the HSRI. IPPL questioned Mr. Michael Nolan, President of Primate Imports, about this transaction, pointing out that the research was wasteful, destructive, and also unnecessary since so many alternative methods of studying traumatic accidents (dummies, computer models etc.) existed. Nonetheless, Primate Imports supplied the baboons for the current experiments.

The purpose of the planned experiments is reportedly the development of data useful in constructing better plastic dummies for use in future tests. The study is financed by the U.S. Department of Transportation.

Members are urged to make **immediate** protests about HSRI's planned baboon experiments to:

The President
University of Michigan
Ann Arbor
MI 48104

and to:

The Secretary of Transportation
Department of Transportation
Washington, D.C.



Infant baboon
by Kamol Komolpalhin

Merck Sharp and Dohme Applies To Import 125 Chimpanzees

The Merck Sharp and Dohme Research Laboratories of Rahway, New Jersey, USA, have applied to the U.S. Federal Wildlife Permit Office for a permit to import 125 chimpanzees (*Pan troglodytes*) for hepatitis research. *Pan troglodytes* is listed as vulnerable in the **Red Data Book** of IUCN (International Union for the Conservation of Nature and Natural Resources) and on Appendix I of the Convention on International Trade in Endangered Species. It appears in the category "Threatened" on the U.S. Endangered Species List.

The application of Merck Sharp and Dohme, which is dated 12 September 1977, states that the chimpanzees will be wild-caught specimens at least one year of age, and that of the total 100 will be females. The chimpanzees are to be procured from Franz Sitter, an animal dealer who operates out of Freetown, Sierra Leone. After use in hepatitis research, the chimpanzees are to be transferred to form a breeding colony at the International Center for Environmental Safety at Alamogordo, New Mexico, which is part of the Albany Union Medical College of New York. The Center already has a large colony of chimpanzees which is housed at the Holloman Air Force Base in Alamogordo.

Importation of the chimpanzees to the United States, which is a party to the Convention on International Trade in Endangered Species, would require from another Convention country production of an export permit issued only when "a Scientific Authority of the State of export has advised that such an export would not be detrimental to the survival of the species." In the case of non-Convention countries, such as Sierra Leone, equivalent documentation is required. It is not clear how any Sierra Leone authority could advise that the export of 125 chimpanzees would not harm the survival of the species since the capture of 100 young females would seriously deplete the future breeders of many populations. Female chimpanzees take about nine years to mature sexually, and mothers only have an infant about once every three and a half to five years. A given group of chimpanzees may not experience more than one or two births a year.

Sierra Leone is a small country of 27,699 square miles in west Africa and is bordered by Liberia and Guinea, both of which countries ban the

export of chimpanzees. Sierra Leone has always been liberal in granting export permits for chimpanzees, however. In 1970, for example, five dealers each held concessions to export 96 chimpanzees a year, and in recent years between 200 to 300 chimpanzees have been exported annually from Sierra Leone. Barbara Harrison in the **Conservation of Nonhuman Primates in 1970**, which was published in 1971, comments: "if the present exportation rate continues, chimps will probably be exterminated in Sierra Leone within a couple of years — at most a decade." According to Dr. Harrison, "concessionaires (from Sierra Leone) have expanded their activities into Guinea and Liberia to fulfill their quotas." There seems little doubt that this kind of poaching would be encouraged by issuance of a permit to Merck Sharp and Dohme. Therefore, IPPL has brought this application to the attention of the Conservation Departments of Liberia and Guinea.

The traditional method of capturing young chimpanzees is through the killing of the mother. Dr. Harrison quotes Dr. A. Kortlandt as saying that between 4 to 6 mothers are killed for each chimpanzee that is successfully exported. In order to fill an order for 125 chimpanzees, at least 500 to 750 mothers might be killed. Since it is difficult to determine the sex of an infant carried by its mother, 200 infants might have to be caught to obtain 100 females, thereby resulting in the deaths of 800 to 1200 mothers.

Merck Sharp and Dohme contends that different capture methods will be used to obtain the chimpanzees. A description of these methods is contained in a memo of a conversation on 23 November 1977 between Mr. Fred Bolwahn of the Federal Wildlife Permit Office and Dr. Alan Creamer of Merck Sharp and Dohme. The description which follows is reproduced verbatim.

Dr. Creamer said that capturing of chimps was accomplished by locating a group of chimps, surrounding them with a number of people and chasing them. The juveniles would usually tire first and these were captured by hand. Females carrying young get away. Females that are nursing young are released. Occasionally chimps are shot by the natives for food or because they are damaging

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Chimpanzee mother and baby Photo: Teleki

crops. When a female that has a young is shot, the infant is taken and sold to a dealer. **It was emphasized that females are shot solely to get the young** (emphasis added). This information was obtained from Franz Sitter of Sierra Leone.

Franz Sitter is the animal dealer from whom Merck Sharp and Dohme intends to obtain the 125 chimpanzees. In a statement of opposition to issuance of the requested permit, Dr. Geza Teleki, who worked with chimpanzees in the Gombe National Park, Tanzania, for several years, described the purported capture techniques as "highly imaginative and pure malarky."

On 25 November 1977, Dr. Creamer informed Mr. Bolwahn that "Michael Nolan of Primate Imports, New York, has reviewed Sitter's collecting methods and approved of them." In 1976 Primate Imports imported 50 chimpanzees from Franz Sitter and offered them for sale at \$1050 to \$1350 each.

Neither Sitter nor Nolan can be considered an objective source of information on the methods used to capture chimpanzees, and there is no record in the files of the Federal Wildlife Permit Office that any specialist on the behavior of wild chimpanzees was asked to comment on the authenticity of the capture technique outlined by Sitter. Major wildlife exporters seldom capture, in fact, the animals that they export.

Usually they offer inducements to hunters, who bring them the animals that they obtain by their traditional hunting methods.

Institutions seeking to import endangered and threatened species are required to produce "a description of all mortalities in the 2 years preceding the date of (the) application." The application of Merck Sharp and Dohme only includes this information for the company's chimpanzees. However, the new chimpanzees are to be transferred permanently after one year to the International Center for Environmental Safety. Therefore, the U.S. Wildlife Permit Office should also evaluate the mortality record of the large chimpanzee colony maintained by the Center.

In 1971 the International Center for Environmental Safety of Albany Union Medical College received a colony of chimpanzees on a 20-year lease from the U.S. Air Force, which had used the chimpanzees for many years in military experiments including decompression studies. In 1974 the colony contained 120 chimpanzees, and, according to the Air Force, the apes were being used "to study their potentialities as a surrogate for man in the study of environmental contaminants." In a letter dated 21 June 1974, Dr. Ira Rosenblum, the Director of the Center, informed IPPL that this was not true, but he refused to identify the nature of the research in which the apes were being used. In addition no recent publications by the Center are available. IPPL is looking into a report that the chimpanzees are being used in secret contract research in toxicology for a consortium of German chemical companies.

Since the chimpanzees at the Center were purchased with U.S. taxpayers' funds and are housed on U.S. government property at the Holloman Air Force Base in Alamogordo, IPPL believes that the activities of the Center should be made public. The secrecy surrounding the use of the chimpanzees suggests that it would be unwise to add to the colony any additional members of a species threatened with extinction.

In recent years the traffic in chimpanzees destined for laboratory use has reached excessive proportions. There are already many large chimpanzee colonies in the United States including the following: Gulf South Corporation, New Iberia, Louisiana; the National Institutes of Health, Bethesda, Maryland; the Delta and Yerkes Regional Primate Research Centers in Louisiana and Georgia respectively; Laboratory for Experimental Medicine and Surgery in Primates (LEMSIP), Tuxedo, New York; and the International Center for Environmental Safety. In addition the New York Blood Center maintains a large colony of chimpanzees in Liberia. IPPL feels that further importation of chimpanzees should be prevented, and that the permit application of Merck Sharp and Dohme Research Laboratories should be rejected.

NOTE: The Merck Sharp and Dohme application was not published in the **Federal Register**. Only applications to import "Endangered" species, and not "Threatened" species, are required by law to be so published. IPPL learned about the existence of the application by accident. Under Section #17.32(b)(3) of the Regulations of the Endangered Species Act, it is stated that one of the issuance criteria for import permits for **both** endangered and threatened species is:

the opinions or views of scientists or other persons or organizations having expertise concerning the wildlife or other matters germane to the application.

But how are scientists and other concerned parties in a position to comment on a permit application when they are not aware of its existence? In the file on the application of Merck Sharp and Dohme at the U.S. Federal Wildlife Permit Office there was no input from objective scientists or other concerned parties, merely information provided by the applicant and the animal dealer involved. Unless this situation is rectified, permits might be issued in cases where fuller consideration and investigation would contraindicate issuance. Therefore, IPPL believes that applications to import **both** endangered and threatened species should be published in the **Register**.

Concerned readers are requested to write the Director, U.S. Fish and Wildlife Service, Washington D.C. 20240 asking for an immediate change in this requirement.

IPPL Newsletter "Banned" From Current Primate References

Mrs. Maryeva Terry, Manager of **Current Primate References** has informed IPPL that the **Newsletter** will no longer be listed in the publication, which is published under a grant from the National Institutes of Health. Ms. Terry justified her decision by stating that the **Newsletter** is not "scientific."

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Chimpanzee Heart Transplant Controversy

On 13 October 1977, Dr. Christian Barnard of the Groote Schuur Hospital, Cape Town, South Africa, transplanted the heart of a chimpanzee into a human patient, who died 82 hours later. Six weeks later, Dr. Barnard, faced by widespread opposition to such use of endangered primates, announced that he was abandoning chimpanzee heart transplants and that he was donating the survivor of the two chimps he had imported to a zoo.

Earlier, in June 1977, Barnard had transplanted a baboon's heart into a young Italian woman, who survived only 2 hours after the operation. At a press conference following the unsuccessful operation, Barnard announced his intention of using chimpanzee hearts in future operations. In what is known as a "piggyback" operation, the chimp heart would be placed alongside the patient's failing heart in order to help it pump blood through the circulatory system. Within a few days, the chimp heart would be removed; the patient would either receive a human heart or be sufficiently recovered to be able to survive without mechanical assistance. The operation would be used only when a compatible human heart was unavailable, since rejection problems would be likely to occur within a few weeks.

Dr. Barnard's announcement led to a storm of protest in the South African press. It was led by Dr. Graham Saayman, Senior Lecturer in Psychology at the University of Cape Town. Dr. Saayman's article entitled "Chimp Donors — It's Like Using Children" appeared in the Cape Times on 24 June 1977. It stated in part:

Research on chimpanzees raised by humans in human family environments has demonstrated that these animals have conceptual abilities which approximate those of a two to three year old human child. Using American Sign Language, a gestural language employed by deaf people, chimpanzees are able to compose sentences at a level comparable to children. Moreover, they are able to conceive and ask questions and have the ability to negate, that is, to refuse or say no ... this means, in effect, that chimpanzees know what is being done to them, because they can no longer be said to be animals which totally lack self-consciousness ... Thus, when chimpanzees are placed in an experimental situation, they may be said to be aware of their horrific predicament in the same way that a human child would be. What is more, chimpanzees are conceptually in a position to object to being placed in such situations and have the capacity to request that they be released. In my view, it is therefore as immoral and unethical to sacrifice chimpanzees in the interests of humanity as it would be to use human children.

On 23 August, Dr. Geza Teleki, who conducted field research on chimpanzees at the Gombe Stream National Park in Tanzania and is a member of IPPL's Advisory Board, issued IPPL's official statement on chimpanzee heart transplants. This statement received wide publicity in the South African press. Dr. Teleki appealed to Dr. Barnard not to use chimpanzees as heart donors on the following grounds:

The chimpanzee (*Pan troglodytes*) is being rapidly eliminated from western and eastern Africa, and the size of populations in central Africa remains unknown. Although west African populations were large a century ago, only small remnant populations remain today in countries west of the Cameroun. The chimpanzee appears on Appendix I of the International Convention on Trade in Endangered Species and the US Fish and Wildlife Service has just listed the chimpanzee as a Threatened Species as defined by the Endangered Species Act of 1973. Even without citing further evidence of international concern for the future of the chimpanzee, it should be obvious that your justification for having used baboon hearts in previous surgical operations — i.e., that baboons in your country are often killed by farmers who might just as well contribute them to medical laboratories — is totally inappropriate in the case of the chimpanzee. On the contrary, the plan to use chimpanzee hearts places you and your institution in the role of consumers on an international

market which many government and conservation agencies are trying to restrict ... To run experiments whose success could stimulate widespread need for an animal already in short supply seems rather irresponsible ... Granted that you can now obtain a few chimpanzees for experimental purposes, where do you intend to obtain additional chimpanzee hearts in future, especially if a successful operation creates a public outcry for more chimpanzee hearts?

In his response to Dr. Teleki dated 23 September 1977, Dr. Barnard failed to address himself to any of the issues raised by Teleki, asserting:

I intend proceeding with this work. The two chimpanzees that I have at this moment were actually going to be destroyed because they had served their purpose in the primate unit. They were redundant.

Dr. Barnard had refused to tell the South African press where he planned to obtain chimpanzees. Evidently, the supplying laboratory did not wish its plans publicized. However, IPPL was able to learn that the animals were to come from the TNO Laboratory in the Netherlands. Its Director, Dr. H. Balner, rejected appeals from IPPL and conservationists and shipped two ten-year old males to Dr. Barnard.

On 11 October, James Clarke, assistant editor of the Johannesburg Star, reported on an interview with Dr. John Skinner, IPPL's South African Representative, who opposed the transplants and drew attention to the likelihood that they would not save lives as claimed. Mr. Clarke concluded that Barnard's experiments, if successful, might lead to the extinction of the chimpanzee, and noted:

Such an irreversible catastrophe as the extinction of a species represents a weakening of the earth's natural variety — that essential variety whose complicated interactions stabilize the earth's living community on which the habitat of man is completely dependent. For that reason, the success of Dr. Barnard's chimp experiments could be against the long-term interests of the survival of humanity and should be dropped.

On 13 October, the first chimpanzee was killed: the recipient of its heart, a 59 year old South African, died 82 hours after the operation, which was filmed by an American television crew. It is not clear whether Dr. Barnard had decided in advance to transplant a chimpanzee heart into this particular patient, or whether a mid-operation emergency had necessitated a transplant, in which case the presence of an American TV team would have been an unusual coincidence.

The operation brought Barnard still more unfavorable publicity in South Africa. Dr. Graham Doyle, head of the Primate Research Center at the University of the Witwatersrand, denounced the operation as "totally immoral." Metta, a South African animal welfare group, circulated tee-shirts carrying the slogan "Stop Barnard Killing Chimps." A two year old chimp at the Natal Zoo was photographed wearing one of these tee-shirts and the picture was picked up by the wire services.

Meanwhile, the surviving chimpanzee appeared well aware that harm had befallen his companion. According to the Toronto Star's South African correspondent:

There were pathetic scenes in the monkey cage next to Barnard's cardiac unit at Cape Town's Groote Schuur Hospital. A lone chimp — the mate of the one whose heart was in yesterday's operation — leaped up and down in a metal cage, screaming continuously in grief at the loss of his mate. One hospital orderly said: "I can't stand much more of this. That animal is making everyone around here feel guilty and miserable."

On 24 November 1977, Dr. Barnard announced that he planned to abandon chimp heart transplants. He stated that they would not work. It is also likely that he had been discouraged from continuing the operations by the flood of adverse publicity. Better days may be in store for the surviving chimp. In a 24 November article, the Cape Town Argus announced that "Romance Awaits Barnard's Chimp" — the animal was to join a lone female at the High Noon Game Farm.

Hoolock Destroyed

The IPPL Newsletter (September 1977) told how IPPL had located a home for a Hoolock gibbon (*Hylobates hoolock*) which was being kept in the San Francisco Zoo hospital. However the Zoo decided to destroy the animal.

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New York Primate Import Declarations For 1976

Analysis of import declarations (Form 3-177) shows that 27,942 primates were imported through the port of New York in 1976, representing almost 89% of all primates imported to the United States in that year. Shipments reaching New York are often very large: 200 monkeys in one shipment is not uncommon.

The tables opposite show the numbers and species of primates imported and the country of origin, as defined by the importer or broker filling in the Form 3-177.

Two dealers imported over 99% of all the primates entering the United States through New York; Primate Imports of Port Washington, Long Island and Primelabs of Farmingdale, New Jersey. The breakdown according to importer is presented in Table 4.

Table 4:
Percentage of primates imported
by New York dealers

	Asia	Africa	South America
Primate Imports	69%	94%	89%
Primelabs	31%	6%	11%

Currently, Primate Imports controls about 70% of the entire U.S. primate traffic. The company is, therefore, in a powerful position regarding establishment of prices and making agreements with dealers in habitat countries. For several species, there is no alternative for U.S. purchasers but to buy from Primate Imports.

For many species, overseas dealers appear to have exclusive trading agreements with one U.S. company: for example, Patterson supplies Primate Imports with Indian Rhesus monkeys and Vita supplies Primelabs. Surma and Ahmed ship Bangla Desh Rhesus monkeys to Primate Imports and Hamid to Primelabs. Research Primates of Malaysia supplies crab-eating macaques to Primelabs and Wildlife Zoological Supplies of Malaysia to Primate Imports. Many of the exporters in habitat countries are Western expatriates. T. E. Patterson, India's leading monkey exporter, is British. Mann and Miller of Kenya is a British company. Franz Sitter, a European expatriate, has exported hundreds of chimpanzees from Sierra Leone in recent years. The Malaysian Game Department has informed IPPL that one of the leading exporters of Malaysian monkeys is a British expatriate who claimed he was going to establish breeding colonies of Crab-eating macaques but, instead, became just another animal dealer.

The last statistics on primate importation made public were published by the Department of the Interior in 1972. Since that time, there has been a substantial decline in the traffic in South American monkeys, with only Bolivia allowing significant export at this time. Rhesus monkey importations dropped from 23,210 in 1972 to 11,844 in 1976 as the result of reductions in India's export quotas. During the same period of time, crab-eating macaque imports increased by 464% from 1397 to 6493. It appears that the Crab-eating macaque is well on its way to taking over the Rhesus monkey's role as the all-purpose research primate. At the present time, Indonesia, the Philippines, and Malaysia allow unlimited export of this species, which is exported in large numbers to the United Kingdom, Australia, Japan, and other countries as well as the United States. Therefore, habitat countries are likely to experience serious shortages in the near future unless some controls are established.

In 1972, not a single Red-bellied tamarin was imported to the United States: the dramatic increase to 580 reflects the introduction of the species to hepatitis research projects as a replacement for the White-moustached tamarin which is now commercially unavailable.

Primelabs imported several shipments of "Dutch" South American monkeys which appear questionable to IPPL. On 27 July 1976, the company imported 50 Cottontop marmosets and 5 Owl monkeys from Hartelust, a dealer in the Netherlands. Three other shipments from the same dealer followed: 36 animals described as "marmosettes" on the Form 3-177 (August 10); 43 "marmoset monkeys" and 3 Owl monkeys (August 17); and 71 Cottontop marmosets (2 September). It is unlikely that these animals were born in the Netherlands. A more likely possibility is that they were smuggled to the Netherlands from Colombia, which bans the export of all primates. The Form 3-177 for the first three shipments states that the country of origin of the animals is the Netherlands, but the form for the 2 September shipment lists the country of origin as Colombia. On 3 November 1977, IPPL contacted Primelabs asking for further information about these shipments and pointing out that, should the animals have been illegally exported from a South American country to the Netherlands, their importation to the United States might be in violation of the Lacey Act, which makes it an offense to import illegally-acquired wildlife. Primelabs has not responded to IPPL's letter.

Until recently, St. Kitts, a Caribbean island which has had a

population of vervet monkeys since the days of the slave trade, has not exported monkeys. The five shipments made in 1976 were all exported by the Behavioral Science Foundation, an American research station on St. Kitts. The Foundation has not answered IPPL's enquiry about its activities.

Sierra Leone continues to allow export of large numbers of infant chimpanzees. Reports indicate that Sierra Leone's population of chimpanzees has been decimated by the shooting of mothers to procure infants for the trade, and that dealers exporting from Freetown are obtaining their animals from poachers in Guinea, Liberia, and other nearby countries, all of which give legal protection to chimpanzees. Three chimpanzees also reached the United States from France. France was named on the import declaration as the country of origin of the animals. The chimpanzees were consigned to the Laboratory for Experimental Medicine and Surgery in Primates (LEMSIP) whose Director, Dr. Jan Moor-Jankowski, informed IPPL that the animals were "military surplus" brought to the United States through the efforts of the French Army and LEMSIP "in order to avoid their destruction."

The gibbons exported from Bermuda had been used in a psychosurgery project on Hall's Island described in the March 1976 IPPL Newsletter. The animals were sent to the National Cancer Institute and LEMSIP. The 100 unidentified African primates were described on the Form 3-177 as "Mandrill baboons (*Mandrillus sphinx*)."

They were exported by the International Animal Exchange (Kenya) to the International Animal Exchange (USA), and it appears unlikely that they were mandrills, which occur in West Africa. The International Animal Exchange failed to reply to a 4 November 1977 enquiry from IPPL about this shipment.

OTHER PORTS OF ENTRY

Very few primates entered the United States at ports other than New York and Miami.

Washington

The Walter Reed Army Institute of Research imported 93 Crab-eating macaques and 5 Pig-tailed macaques from the U.S. Army Institute of Medical Research in Kuala Lumpur, Malaysia. The National Institutes of Health imported 436 Rhesus monkeys directly from India.

San Francisco

Three Japanese macaques (*Macaca fuscata*), one Ring-tailed lemur (*Lemur catta*), and 3 Squirrel monkeys (*Saimiri sciureus*) were the only primates entering via San Francisco in 1976.

Honolulu

12 Owl monkeys reached Honolulu from Panama in 1976.

Seattle

120 Pigtail macaques and 20 Crab-eating macaques from Indonesia entered the United States at Seattle in 1976. In addition, hunters from Seattle imported several "trophies": these included vervet monkeys, Colobus monkeys, and baboons.

Chicago

Primates entering the United States via Chicago in 1976 were: 10 Gelada baboons (*Theropithecus gelada*) from Ethiopia, 1 Black and White colobus monkey (*Colobus guereza*) from Kenya, 7 Rhesus monkeys from Canada and 3 siamangs from Singapore. The siamangs were shipped by the well-known Singapore animal dealer, Y. L. Koh, to the International Animal Exchange. Since siamangs do not occur in Singapore, IPPL has asked the U.S. Fish and Wildlife Service to investigate this shipment, which appears to violate the Lacey Act.

Miami

Apart from the 3015 South American primates (See IPPL Newsletter, September 1977), 28 African primates entered the United States via Miami in 1976: 3 chimpanzees from Sierra Leone; 16 Patas monkeys from Nigeria, 1 Patas monkey from Ghana, 1 Guinea baboon from Ghana, 1 Spot-nosed monkey from Ghana, and 6 Green monkeys from Ghana.

TOTAL IMPORTATIONS

Total primate importations to the United States totalled 31,699 in 1976, of which 20,083 were macaques. The most commonly imported species were:

Rhesus macaque	12,287
Crab-eating macaque	6,588
Squirrel monkey	3,993
Vervet monkey	3,248
Cottontop marmoset	900
Baboon	720
Red-bellied tamarin	580
Owl monkey	475

Apr 1978

TABLE I
Asian primates imported into the United States through New York in 1976

SPECIES	India	Bangla- desh	Malay- sia	Indo- nesia	Philip- pines	Thai- land	Hong Kong	Cana- da	Bermu- da	TOTAL
Rhesus macaque [<i>Macaca mulatta</i>]	10703	1043					48	50		11844
Assamese macaque [<i>Macaca assamensis</i>]		905								905
Bonnet macaque [<i>Macaca radiata</i>]	4									4
Pigtail macaque [<i>Macaca nemestrina</i>]				32						32
Stumptail macaque [<i>Macaca arctoides</i>]				20		120 ^a		1		141
Crab-eating macaque [<i>Macaca fascicularis</i>]			3413	1090	1950			20		6473
White-handed gibbon [<i>Hylobates lar</i>]									3	3
TOTAL	11612	1043	3465	1090	1950	120	48	71	3	19402

a. A total ban on export of primates from Thailand became effective in April 1976.

TABLE II
African primates imported into the United States through New York in 1976

SPECIES	Sierra Leone	Sene- gal	Niger- ia	Chad via UK	Kenya	Ethi- opia	Somal- ia	St. Kitts	France	TOTAL
Chimpanzee [<i>Pan-troglodytes</i>]	61								3	64
Hamadryas baboon [<i>Papio hamadryas</i>]						27				27
Savannah baboon [<i>Papio cynocephalus</i>]					588	55				643
Guinea baboon [<i>Papio papio</i>]		50								50
Vervet monkey [<i>Cercopithecus aethiops</i>]	8				2649	370	174	41		3242
Fatas monkey [<i>Erythrocebus patas</i>]			195	84						279
Red colobus monkey [<i>Colobus badius</i>]					85					85
Bushbaby [<i>Galago senegalensis</i>]					275					275
Species unclear					100					100
TOTAL	69	50	195	84	3697	452	174	41	3	4765

TABLE III
South American primates imported into the United States through New York in 1976

SPECIES	Guyana	Bolivia	Netherlands	Canada	TOTAL
Owl monkey [<i>Aotus trivirgatus</i>]		105	53		158
Black-capped Capuchin [<i>Cebus apella</i>]		199			199
Cottontop marmoset [<i>Saguinus oedipus</i>]			121		121
Red-bellied tamarin [<i>Saguinus labiatus</i>]		580			580
White-lipped tamarin [<i>Saguinus nigricollis</i>]				12	12
Titi monkey [<i>Callicebus moloch</i>]		21			21
Squirrel monkey [<i>Saimiri sciureus</i>]	51	2548			2599
Marmosets, species unclear		6	79		85
TOTAL	51	3459	253	12	3775

Apr 1978

New Law in Netherlands

In recent decades, the Netherlands has been one of the most notorious importers and transshippers of endangered wildlife. The country had no law banning the importation of smuggled animals. As a result, it became a center for trade in orang-utans poached in their home countries of Indonesia and Malaysia. In 1977, a Dutch dealer, A. M. van der Bijl of Naarden-Bussum, offered a Pygmy chimpanzee for sale. The Pygmy chimpanzee is restricted in distribution to the African nation of Zaire, which bans the export of this species. In response to complaints from IPPL, Dutch authorities stated that such transactions did not violate Dutch law.

It is therefore good news that, on 16 July 1977, a new law, the Endangered Exotic Species Act, came into force in the Netherlands. Under this act, all primates are classified as endangered, and trading is banned without prior issuance of a permit from the Fauna and Flora Division of the Ministry of Culture, Recreation, and Social Welfare. Mr. O. Reussien, IPPL's Representative in the Netherlands, reports that the Act is being strictly enforced, with institutions and private individuals owning endangered animals being required to register their holdings with the Ministry. Unfortunately, animals in captivity at the time of the Act's passage are not protected by it. Thus, the TNO Laboratory in the Netherlands was allowed to export two chimpanzees to Dr. Christian Barnard of the Cape Town Medical School in South Africa for use as heart donors for human patients. Shipping endangered animals for the express purpose of destroying them appears to violate the spirit, if not the letter, of any endangered species legislation.

Frostbitten Monkeys at Chico's

Mr. Richard Porter, an IPPL member, recently visited Chico's Monkey Farm, a roadside zoo 20 miles south of Savannah, Georgia USA. Although the weather was freezing, Mr. Porter reported that the Monkey Farm failed to provide adequate heating for the primates. Several members of a large group of squirrel monkeys had lost parts of their tails to frostbite and the wounds were open and did not appear to have been treated. A lone Woolly monkey sat huddled in a cage whimpering. A Hamadryas baboon was confined in a cage no larger than a coat-closet and was making stereotyped movements. A chimpanzee was kept in an old circus wagon. The glass front was so filthy that the animal could hardly be seen.

The Department of Agriculture, which is charged with enforcing the U.S. Animal Welfare Act, has received many complaints about Chico's Monkey Farm in the past. It is inexcusable, that, in spite of the Act, primates should continue to be treated in this way at any "zoo." IPPL has contacted the Department of Agriculture asking that immediate action be taken to improve the situation of these primates. The Savannah News has also been asked to investigate. IPPL is also exploring the possibility of prosecuting Chico's should Georgia's anti-cruelty laws have been violated.

Profiteering in the Monkey Business?

On 22 January 1978, United Press International, one of the world's leading news services, carried a story by Ms. Rita Shade entitled "Monkey Business." UPI was able to acquire industry documents which showed that the price of a monkey was \$2.20 from the jungle, but that the monkeys were eventually sold to US consumers for \$190 to \$400. Ms. Shade commented: "a close look at the Rhesus import trade indicates secrecy about price, entangled relationships, and high profits." Michael Nolan, President of Primate Imports, was quoted as saying that, "it is not the goose that laid the golden egg, it is a small business and an ethical one." Primate Imports imported over 20,000 primates in 1976 however. Dr. Robert Gelok, Director of Primelabs, stated that the company paid \$45 to its Indian source for monkeys. Dr. Joseph Held, chief of the Division of Research Resources at the National Institutes of Health was quoted as expressing surprise at the \$45 price, since NIH paid Primelabs an average price of \$170 for Rhesus monkeys shipped directly from India.

According to UPI, two dealers control the Indian export market for Rhesus. T. E. Patterson, a British expatriate, and Manmohan Rai, who now lives in the United States. These men used to own the U.S. importing companies also. Rai sold Primelabs to Hazelton Laboratories but receives a fee based on sales. Indian newspapers have recently raised questions about the conduct of the Rhesus monkey business. India has a law that requires that 60% of any business operating in India be owned by Indians.

A US laboratory director recently complained to IPPL about alleged exploitation of the Rhesus shortage by animal dealers. He showed IPPL three small Rhesus monkeys for which the laboratory had paid \$425 each, twice the price of a similar shipment it had imported in July 1977.

High Mortality At Washington Primate Center

Study of the 1975 Annual Reports of the 7 Regional Primate Centers in the United States reveals that mortality at the Washington Regional Primate Center, Seattle, Washington, exceeded that of other centers both in natural and experimental deaths. The seven Centers are: the New England Primate Center, Southborough, Massachusetts; director, Dr. Ronald Hunt; the Delta Primate Center, Covington, Louisiana, director, Dr. Peter Gerone; the Yerkes Primate Center, Atlanta, Georgia, director, Dr. Geoffrey Bourne; the Oregon Primate Center, Beaverton, Oregon, director, Dr. William Montagna; the Wisconsin Primate Center, Madison, Wisconsin, director, Dr. Robert Goy; the California Primate Research Center, Davis, California, director, Dr. Walter Tyler; and the Washington Regional Primate Center, Seattle, Washington, director, Dr. Orville Smith.

A table of the mortality at the different Centers follows:

Center	Inventory, 1 Jan. 1975	Total deaths	Deaths in quarantine	Non-experi- mental deaths	Experi- mental deaths
Washington	1474	530	15	218	297
New England	1135	316	44	133	139
California	1811	237	—	116	121
Delta	905	250	43	131	76
Oregon	1760	232	—	129	103
Yerkes	1421	188	19	126	43
Wisconsin	922	123	1	80	42

Several Primate Centers Not Accredited

The American Association for Laboratory Animal Care has an accreditation program for facilities using animals in biomedical studies. Three of the U.S. Primate Centers have full accreditation: the California Regional Primate Center, the New England Primate Research Center, and the Oregon Regional Primate Center. The Delta Primate Center has provisional accreditation. The following centers are unaccredited: the Washington Regional Primate Center, the Wisconsin Primate Center, and the Yerkes Primate Center. This information was provided to IPPL by Dr. Leo Whitehair, Director of the Primate Research Centers program at the National Institutes of Health.

Comments Sought On National Primate Plan

The U.S. Federal Register (10 February 1978) called for public comments on the draft "National Primate Plan" prepared by the Inter-agency Primate Steering Committee. Copies of the draft plan may be obtained from:

Executive Director
Interagency Primate Steering Committee
NIH Building 14G
Bethesda, MD 20014

The draft plan strongly endorses commercial trafficking in wild-caught primates, although this form of procurement has caused immense suffering to animals in the past, being operated by animal dealers out to make profits with little or no regard for animal life. Commercial traders have used a variety of smuggling techniques to continue their activities in the face of growing international efforts to control the wildlife trade. Although government-to-government arrangements with limited numbers of animals caught for specific projects have been shown to result in less loss of animal life, the draft plan only approves of such arrangements when commercial operators fail to produce the desired animals.

The plan calls for the establishment of 9 new breeding colonies to produce a minimum of 750 infant primates of 6 species annually, which is around 2.3% of the annual anticipated demand foreseen by the Committee. To procure the tens of thousands of wild-caught animals which would still be wanted, aggressive efforts are proposed to maintain and increase supplies of wild primates. It is clear that wildlife authorities in primate habitat countries can expect constant pressure either to export primates or make them available for local U.S.-financed exploitation in future years. Such constant battles may distract these authorities from their forest preservation activities.

Comments on the draft plan are to be submitted prior to 11 April 1978.

Apr 1978



Circus Sideshow Operator Arrested in Three States

In June 1977, the Humane Society of the United States (HSUS) sent a team of investigators to follow the Carson and Barnes circus on its tour of the states of Maryland, Virginia, and West Virginia. The circus describes itself as "America's Largest Wild Animal Circus." The HSUS investigators were particularly appalled at one exhibit called the "African Village." The "Village" consisted of a trailer occupied by 6 primates: a gorilla, and orang-utan, three chimpanzees, and a spider-monkey. On seeing this exhibit, HSUS investigator Phil Steward commented: "They might as well be stuffed. They do nothing but sit or lie down and get stared at by passing people."

The Humane Society filed complaints in each state charging the exhibit's operator, Mr. William Shearer, with violation of state anti-cruelty laws. The state trooper who arrested Mr. Shearer in Maryland commented: "I found the situation with the animals to be even worse than described. The stench from the animals in the heat was almost unbearable. It felt about 100° inside the trailer with the small fan at one end doing little to cool the van."

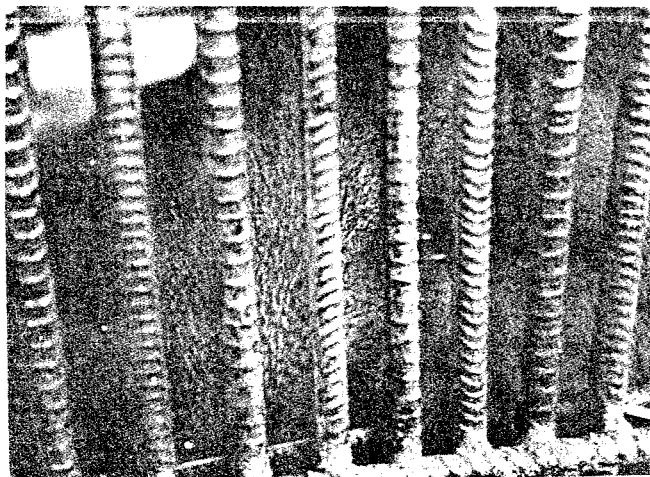
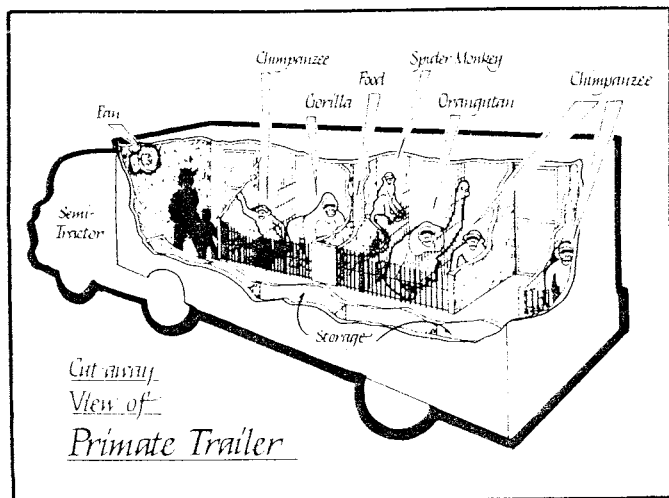
HSUS also tried to get the Department of Agriculture to take action against the exhibit under the Animal Welfare Act. The Act prescribes

standards for the handling, care, and transportation of primates: these cover such things as caging (size and strength); ventilation (temperatures may not fall below 50° or rise above 85°); lighting, sanitation, drainage, veterinary care, feeding, and watering. The Animal Welfare Act prescribes prison terms up to one year and fines up to \$1,000 for violators.

The Department of Agriculture inspector agreed with HSUS that the circus was in violation of the Animal Welfare Act. However, instead of seeking legal action, he gave Mr. Shearer 5 weeks to remedy the situation, thus allowing the circus to continue its tour without having to make any improvements.

HSUS recently informed IPPL that none of its 3 prosecutions resulted in a conviction.

IPPL encourages members to check conditions in travelling circuses and to complain to local authorities and humane societies if they see primates, or other animals, in unsatisfactory conditions. The U.S. Department of Agriculture should also be notified, although the chances that it will do anything to enforce the Animal Welfare Act are slim. Please send reports of any incidents to IPPL, with exact dates and places, name of the circus, and photographs of the primates.



Apr 1978



Male Black lemur; Photo: Tattersall



Female Black lemur; Photo: Tattersall

Black and Ring-Tailed Lemurs Determined to Have Captive Self-Sustaining Populations

On June 1, 1977, the U.S. **Federal Register** published a list of bird and mammal species determined to have "Captive Self-Sustaining Populations." The list included the Black lemur (*Lemur macaco*) and the Ring-tailed Lemur (*Lemur catta*), both of which appear on the U.S. Endangered List in the category "Endangered," and on Appendix I of the Convention on International Trade in Endangered Species.

The effect of this determination is that institutions holding groups of these species may obtain permits for single or serial transactions or for unlimited transactions over a 2-year period. Transactions can involve trades with other institutions in the United States holding permits to trade in these species or can involve loans for breeding purposes with overseas institutions. However, importation of these species from overseas would still require prior issuance of an Endangered Species permit, except in the case of the return of a "loan" animal.

Ring-tailed lemur New York Zoological Society Photo



Apr 1978

Good News From Kenya

Kenya's ban on the trading of articles made from animal parts came into effect on 12 March 1978. In the months before the ban, dealers made last-minute efforts to get rid of animal products, including rugs made of Colobus monkey skins.

Kenya's decision has been applauded by conservationists around the world. IPPL has sent a letter of commendation to President Jomo Kenyatta.

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San Diego Zoo Sold A Sexually Incompetent Gibbon For Breeding

The IPPL Newsletter (September 1976) reported that the San Diego Zoo had sold an endangered White-cheeked gibbon to the Comparative Oncology Laboratory, University of California at Davis, which is under federal investigation for importation of gibbons illegally exported from Thailand, and has no gibbons belonging to this species.

On 2 February 1977, Mr. Charles Bieler, Director of the San Diego Zoo, informed Mr. Richard Parsons, Chief of the Federal Wildlife Permit Office, of the reason for this sale. Bieler stated:

This animal was closely studied by a behaviorist from the Psychology Department at San Diego State University prior to the sale and the behaviorist confirmed our diagnosis that the animal was psychotic and sexually incompetent ... the fact of the matter is that UC Davis wanted the animal for their breeding program.

According to Bieler, the gibbon made a "miraculous" recovery at the laboratory, proving the inaccuracy of the diagnosis of "psychosis" by the zoo staff and the "behaviorist" from San Diego State University.

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FM SECSTATE WASHDC
TO AMEMBASSY KINSHASA
BT

Classification

CONTROL: 1952

DATE : MARCH 7, 1974

LIMITED OFFICIAL USE STATE 244916

E.O. 11652: N/A
TAGS: TB10, CG, US
SUBJECT: DWARF CHIMPANZEE PROJECT
REF: NEWLIN-ENGEL MEETING JAN. 22, 1974

FOR AMBASSADOR VANCE FROM JULIEN ENGEL, NAS

1. NAS WOULD BE MOST GRATEFUL IF YOU WOULD TAKE UP DWARF CHIMPANZEE PROJECT WITH PRESIDENT MOBUTU TO OBTAIN PRESIDENTIAL INTERVENTION TO EXPEDITE DEVELOPMENT OF THIS PROJECT. ALTERNATIVE COLLABORATIVE ARRANGEMENT WITH NSELE PRESIDENTIAL ANIMAL RESERVE NOW FAVORED BY NAS OVER PREVIOUSLY DISCUSSED LINK WITH IRSAC. PRESIDENT'S PERSONAL INTEREST IN THIS AND RELATED MATTERS NOW VITALLY NECESSARY. FOLLOWING POINTS SUBMITTED FOR BACKGROUND

A) WAS NOW VERY DOUBTFUL OF IRSAC UNDER PRESENT MANAGEMENT AS DEPENDABLE COLLABORATING INSTITUTION. DIRECTOR'S ASSURANCES OF INTEREST AND COMMITMENT, REAFFIRMED DURING RECENT ENGEL VISIT, REMAIN WITHOUT FOLLOW-UP CONTINUING PATTERN OF INACTIVITY AND THEN EXCUSES OF PAST 18 MONTHS.

B) NEWLY EMERGED ALTERNATIVE POSSIBILITY OF SITING BREEDING COLONY IN SPECIAL COMPOUND WITHIN NSELE PRESIDENTIAL ANIMAL RESERVE (IN WOODED AREA TRAVERSED BY SERPENTINE NSELE RIVER) PRESENTS SEVERAL COMPELLING --

FEATURES: 1) PRESIDENTIAL PATRONAGE AND RESOURCES LIKELY TO PRODUCE RAPID MOVEMENT; 2) NSELE ZOO VIBRANT COLLABORATING INSTITUTION POSSESSING ENTERPRISING PROFESSIONAL ZAIROIS SCIENTIFIC STAFF AS WELL AS SUITABLE FACILITIES (THIS NOT TO EXCLUDE US TRAINING OF ADDITIONAL STAFF AS ORIGINALLY ENVISAGED); 3) PROXIMITY TO KINSHASA SIGNIFICANT CONVENIENCE FACTOR FOR MONITORING BY COORDINATOR, PROMPT MEDICAL ATTENTION IF NECESSARY, AND AS ANIMAL DEPOT FOR FUTURE RESEARCH CENTER.

C) MOST IMPORTANT CONSIDERATION IS NEED FOR STRONG PRESIDENTIAL COMMITMENT IN ORDER TO ENSURE AVAILABILITY

OF OFFICIAL ZAIROIS LOGISTICAL SUPPORT FOR FIELD OPERATIONS, ESPECIALLY CAPTURE OF INITIAL PAIR FOR YERKES STUDIES AND OF LATER 20-30 ANIMALS FOR BREEDING STOCK. PRESENT FRUITLESS FIELD STUDIES ALONG FOREST RIM BY YALE AND JAPANESE GROUPS SUGGEST DWARF CHIMPS TO BE FOUND IN NUMBERS ONLY DEEP IN CONGO FOREST, WELL AWAY FROM VILLAGES AND ROADS, WITH ACCESS PERHAPS ENTAILING HELICOPTER TRANSPORT. THIS FACTOR ALONE MAY MULTIPLY COSTS WELL BEYOND CAPABILITIES OF ANY SCIENTIFIC BODY. THUS PURSUIT OF PROJECT, ESPECIALLY IN STARTING PHASE, DEMANDS OR GREATER DEGREE OF ZAIROIS COLLABORATION AND MATERIAL INPUT THAN AT FIRST PROJECTED, WHICH IRSAC COULD NOT PROVIDE UNDER BEST OF CIRCUMSTANCES.

D) NAS DOES NOT WISH TO ABANDON IRSAC ALTERNATIVE IN VIEW OF EXCELLENT INFRASTRUCTURE OF NABALI STATION AND POTENTIAL LONG-TERM SCIENTIFIC VALUE OF MAINTAINING TWO WIDELY SEPARATED FACILITIES, ONE LOCATED WITHIN DWARF CHIMP ECOLOGICAL ZONE. OPTIMALLY, NAS WOULD FAVOR NSELE AS SITE FOR LARGER SCALE PRIMARY EFFORT, AND IRSAC NABALI FOR SMALLER SCALE SECONDARY ONE.

E) TECHNICAL STUDIES OF SUITABILITY OF NSELE SITE REMAIN TO BE DONE; NO MAJOR DRAWBACKS ARE ANTICIPATED. IN BROACHING THE NSELE ALTERNATIVE, CARE SHOULD BE TAKEN THAT NAS NOT BE DIRECTLY IDENTIFIED AS THE SOURCE OF THE IDEA FOR FEAR OF POSSIBLY ADVERSE REACTIONS FROM IRSAC. KISSINGER



Department of State TELEGRAM

UNCLASSIFIED// 3529

PAGE 01 KINSHA 00291 061354Z
ACTION AF-28

INFO OCT-01 150-03 DES-26 CU-04 NAS-01 PM-04 DORE-03 SP-22
PRS-01 /027 W

R 061330Z JAN 77
FM AMEMBASSY KINSHASA
TO SECSTATE WASHDC 1157
INFO USCINCEUR VAIHINGEN GER//ECJA/7-SACD-M//PTC//

UNCLAS KINSHASA 0091

DEPT FOR AF/EX

E.O. 11652: N/A
TAGS: PFOR, SERV
SUBJECT: ORANGUTANS FOR MOBUTU

REFS: (A) STATE 282026; (B) ZAIRISH 221302Z NOV 75; (C) ZAIRISH 092202Z DEC 76

1. SINCE 1974, THE NATIONAL ACADEMY OF SCIENCES AND THE YERKES REGIONAL PRIMATE RESEARCH CENTER OF EMORY UNIVERSITY HAVE COOPERED CLOSELY WITH ZAIRE'S INSTITUTE FOR SCIENTIFIC RESEARCH IN THE DEVELOPMENT OF MEDICAL AND SCIENTIFIC DATA BASED ON EXPERIMENTATION WITH A RARE SPECIES OF DWARF CHIMPANZEE FOUND ONLY IN ZAIRE. THIS ZAIRIAN-AMERICAN COOPERATIVE VENTURE WAS ARRANGED THROUGH THE OFFICE OF THE PRESIDENCY IN ZAIRE.

2. IN ORDER TO EXPRESS ITS APPRECIATION TO PRESIDENT MOBUTU, THE YERKES INSTITUTE HAS DECIDED TO DONATE TWO VALUABLE ORANGUTANS TO PRESIDENT MOBUTU'S PERSONAL ZOO. THE GIFT WAS ALREADY BEEN ACCEPTED IN PRINCIPLE ON THE PRESIDENT'S BEHALF BY THE DIRECTOR OF ZAIRE'S INSTITUTE FOR SCIENTIFIC RESEARCH DURING HIS RECENT TRIP TO THE UNITED STATES. THE PHYSICAL TRANSFER OF THE ORANGUTANS REMAINS TO BE COMPLETED, HOWEVER, WE BELIEVE THAT THE ORANGUTANS SHOULD BE TRANSFERRED TO ZAIRE IN A US MILITARY AIRCRAFT

IN ORDER TO ENSURE PROPER HANDLING AND CARE OF THE LARGE ANIMALS IN TRANSIT. AS IT IS PLANNED FOR AMBASSADOR CUTLER TO PRESENT THE ORANGUTANS TO PRESIDENT MOBUTU AS A SYMBOL OF THE ACTIVE SCIENTIFIC COOPERATION BETWEEN ZAIRE AND THE UNITED STATES, IT IS ABSOLUTELY NECESSARY THAT THE ANIMALS BE IN EXCELLENT PHYSICAL CONDITION WHEN THEY ARRIVE. WITH A MILITARY AIRCRAFT, WE CAN BE ASSURED THAT TEMPERATURE CONTROLS, LOADING PROCEDURES, AND TRANSIT HANDLING WILL BE CONDUCTIVE TO GOOD HEALTH IN THE ANIMALS.

3. ACCORDING TO DR. JULIEN ENGEL OF THE NATIONAL ACADEMY OF SCIENCES, YERKES INSTITUTE IS WILLING TO PAY TRANSPORT COSTS FOR THE ORANGUTANS. GIVEN THE SYMBOLIC NATURE OF THIS EXCHANGE, IT IS CERTAINLY WITHIN THE INTERESTS OF THE UNITED STATES TO ASSIST YERKES IN FINDING THE SAFEST POSSIBLE MEANS OF TRANSFERRING THE ANIMALS.

4. AS DEPARTMENT IS AWARE, FREIGHT TRAFFIC ON PANAM ROUTING IS VERY HEAVY WITH RESULT THAT DEPARTMENT IS COLLIDED SHIP SURFACE TO AIR POUCHES TO AF POSTS VIA AMERICAN CARRIER TO EUROPE AND THEN BY FOREIGN CARRIER TO POSTS. TO ASSURE TIMELY AND SAFE TRANSPORT OF THE GIFT FROM YERKES INSTITUTE, DEPARTMENT IS REQUESTED TO SEEK AUTHORIZATION FROM DOD TO MAKE THIS SHIPMENT BY MAC FLIGHT FROM CHARLESTON TO KINSHASA. CUTLER

Pygmy Chimpanzee Developments

IPPL has received from the US State Department several documents, which were previously withheld, pertaining to the Pygmy chimpanzee project in Zaire sponsored by the National Academy of Sciences and the Yerkes Primate Center. It appears that the initial withholding of the documents was unjustifiable since none fell into any category which the US Government can, under the Freedom of Information Act, legally withhold. It appears, rather, that the State Department was attempting to cover up the impropriety of its own activities in furthering the project.

For those unfamiliar with the Pygmy chimpanzee project, it is divided into three phases: 1) capture of several Pygmy chimpanzees in Zaire for export to the Yerkes Primate Center in Atlanta, Georgia, USA, for evaluation of the species' biomedical potential, 2) capture of 50 Pygmy chimpanzees for transfer to islands in Lake Tumba, Zaire as the nucleus of a breeding colony, and 3) establishment of an International Primate Center in Zaire. Only Phase 1 of the project has been completed so far. As might have been anticipated, the Yerkes Primate Center's studies showed the Pygmy chimpanzee to be suitable for laboratory use.

The newly-acquired documents include three of particular interest.

1) A State Department telegram dated 7 March 1974 from Julian Engel of the National Academy of Sciences to US Ambassador Sheldon

Vance in Kinshasa, Zaire. The telegram (illustrated) asks the Ambassador to intervene with Zairean authorities to get the negotiations, which were stalled, going again. It is clear from the telegram that, in spite of repeated claims to the contrary by Dr. Bourne, Director of the Yerkes Primate Center, and Dr. Engel, that the Pygmy chimpanzee is common in Zaire, they were aware that it is, in fact, not abundant. The tone of the telegram seems disrespectful of officials of the Zairean Government, especially Dr. Ntaka Nkumu, Director of Zaire's Institute for Scientific Research, which was to participate in the project. It is evident that the National Academy of Sciences was prepared to dump the Institute and collaborate with another Zairean organization, but that it did not wish itself identified as the source of such an idea.

2) A document dated 26 July 1976 outlining the history of the Pygmy chimpanzee project for the new American Ambassador to Zaire, Walter Cutler. This briefing paper, prepared by Marshall McCallie, a Political Officer at the Kinshasa Embassy, states that: "Ambassador Vance went to the highest levels, in conversation with either Bisengima (Mobutu's Principal Adviser) or Mobutu himself, to expedite the development of the project." McCallie also notes that, "It is the intention of Yerkes Institute to give to President Mobutu two healthy orang-utans next January for the Presidential Zoo (each orang-utan is worth \$1,500).

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Doctor Bourne suggested that perhaps the Ambassador would like to make the presentation."

3) A State Department telegram (illustrated) dated January 1977, from Ambassador Cutler in Zaire to the U.S. Secretary of State, seeking permission for 2 orang-utans to be flown in a military aircraft from Charleston, South Carolina, to Kinshasa, Zaire.

IPPL considers it irresponsible to offer two endangered orang-utans, purchased from U.S. taxpayers' funds, to a foreign ruler. It appears that the purpose of the planned gift is to smooth the way for future project activities. In 1973, the Yerkes Primate Center exported an

orang-utan to Moscow Zoo, where it died within a month. Since the original Yerkes orang-utan colony consisted of wild-caught animals from Samatra and Borneo which somehow reached the United States in spite of laws banning their export in both Indonesia and what is now East Malaysia, it would seem more appropriate that, if the Yerkes Primate Center wishes to dispose of some surplus orang-utans, they should be sent to one of the Orang-Utan Rehabilitation projects on Borneo and Sumatra.

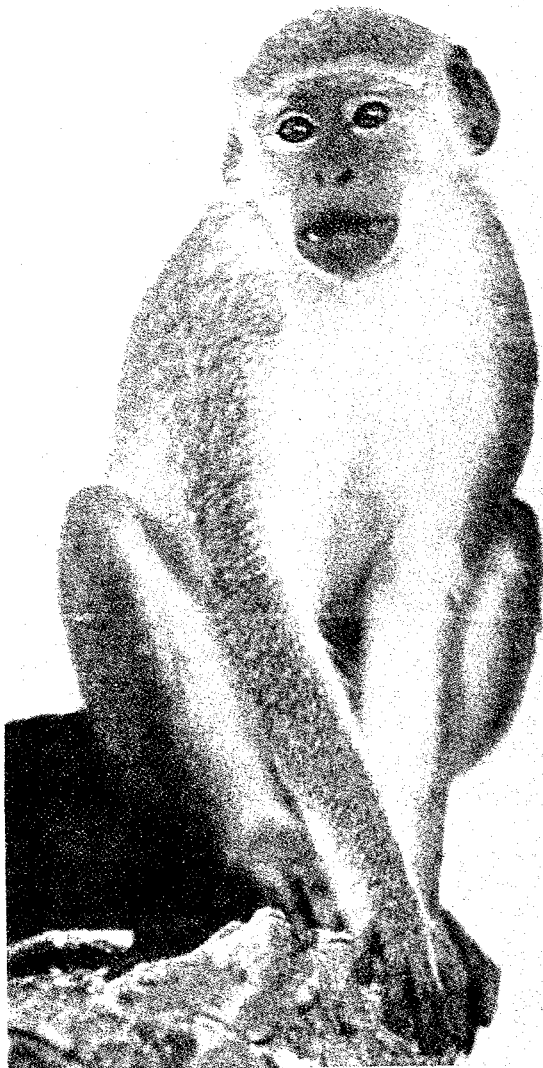
IPPL has not yet learned whether the orang-utans were actually shipped, but this information will appear in the next IPPL Newsletter.

New Books by IPPL Officers

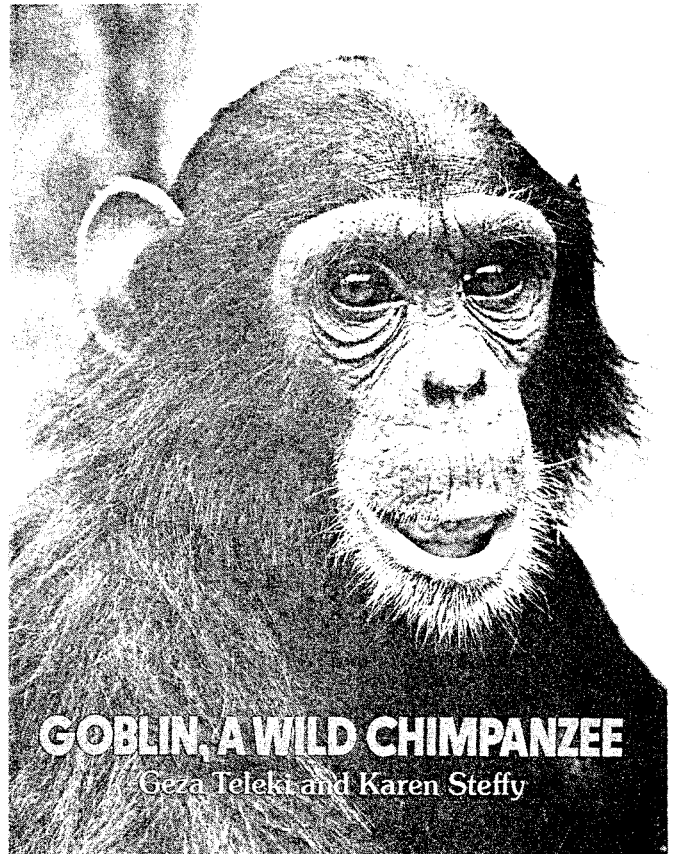
Dr. Geza Teleki, a member of IPPL's Advisory Board, and Karen Steffy are the authors of a newly-published children's book **Goblin the Wild Chimpanzee**, which has been chosen one of the 30 best children's books published in 1977 by the School Library Association. The book is suitable for children 7-12 years of age. Goblin is a real chimpanzee living in Gombe National Park, Tanzania. The book tells the story of one day in his life and is excellently illustrated with Dr. Teleki's photographs which he took while studying at the Gombe National Park with Jane Goodall.

Goblin the Wild Chimpanzee is published by Dutton, New York.

Dr. S. M. Mohnot, IPPL's Representative for Central and West India, is the co-author with Dr. M. L. Roonwal of **Primates of South Asia: Ecology, sociobiology, and behavior** published by the Harvard University Press.



Vervet Monkey



Mistreatment of Primates At Louisville Zoo Alleged by Employees

On 8 June 1977, the Louisville, Kentucky, **Times** reported on unsatisfactory conditions at the Louisville Zoo, as described by zoo employees.

Seven vervet monkeys suffered frostbite in the cold winter of 1976-77 and had to have their tails amputated. Their only shelter was a wooden box constructed to house two monkeys. Apparently, the monkeys had also fought each other to get close to the heater in the box.

Six chimpanzees were being kept in small steel cages lining the walls of a narrow, dimly-lit area behind the building which had been used for a "Chimp Show" dropped a year previously. The chimpanzees remained in cages which "barely gave the animals room to stand on all fours."

In the autumn of 1976, six of seven Colobus monkeys died of salmonella poisoning. The sole survivor was being kept in the isolation room of the zoo hospital, and, according to a keeper, "hasn't seen sunlight in months."

IPPL contacted the zoo's Director in July 1977 in order to learn what improvements have been made since these incidents. No reply has been received. January 1978 has been particularly severe in Louisville and Louisville members of IPPL are urged to check the conditions at the zoo.

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