NEWSLETTER



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White-handed gibbons

SPECIAL REPORT: IPPL PLANS LEGAL ACTION TO PROTECT LABORATORY GIBBONS

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The Comparative Oncology Laboratory, University of California, Davis, California, USA, has a research program which involves inoculating healthy baby gibbons with a C-type virus that can cause their deaths 9-15 months later of a leukemialike disease. All gibbon species are listed on the U.S. Endangered List in the category "Endangered." Under the U.S. Endangered Species Act, permits are required to harm or kill members of an endangered species. So far, this permit requirement has not been enforced on laboratories killing primates belonging to endangered species.

On 18 January 1980, the International Primate Protection League served a Notice of Violation of Section 9(a) (1)(B) of the Endangered Species Act on Cecil Andrus, U.S. Secretary of the Interior, the President of the University of California, the Chancellor of its Davis campus, and Dr. Thomas Kawakami, Director of the Comparative Oncology Laboratory, which performs the inoculations.

Section 11(g) of the Endangered Species Act provides for citizen suits 1) to enjoin parties to cease activities alleged to be in violation of the Act and 2) to compel the Department of the Interior to enforce the Act's provisions. Sixty days' notice must be given prior to the initiation of legal action. If the situation is not resolved at the end of this period, the citizen or group may file suit in a U.S. court.

The Comparative Oncology Laboratory has a colony of approximately 50 gibbons, many of which were originally obtained on the international black market (see "Origin of Comparative Oncology Laboratory Gibbons," this issue). Research on the gibbons has been funded through U.S. government contracts. Currently, Dr. Thomas Kawakami is the Principal Investigator for the project. The virus with which the gibbons are inoculated has not been found in human leukemia or even in other nonhuman primates, according to contract Progress Reports obtained by IPPL.

Section 9 of the Endangered Species Act lists "prohibited acts." These include "taking" an animal belonging to an endangered species. Section 3(14) of the Act defines "take" as including "harass, harm...wound, kill...or attempt to engage in such activities." IPPL contends that inoculating baby gibbons with a fatal virus constitutes "taking" and is thus prohibited under the Act, unless a permit is first issued.

According to Section 10 of the Endangered Species Act, an otherwise prohibited activity may be performed if the Secretary of the Interior finds that 1) an exception was applied for in good faith, 2) it will not operate to the detriment of the species in question, and 3) it will be "consistent with the purposes and policy of the Act."

Any application for a permit to perform an otherwise prohibited activity must be published in the U.S. **Federal Register.** The announcement must include an invitation for public comment. Permit applications must include a detailed description of

mortality for the species in question over the last 5 years and details of the proposed activity. The Director of the U.S. Fish and Wildlife Service (a division of the Department of the Interior) is required to take public comments into consideration in evaluating a permit application.

IPPL's attorney, Laurens Silver, contended that: "The International Primate Protection League has been deprived of its legal right to comment and participate in any permit proceedings under the Act relating to the experiments being conducted at the Comparative Oncology Laboratory, by reason of the failure of the University of California and/or Dr. Thomas Kawakami to apply for a permit under the Act."

IPPL requested not only that the Department of the Interior enforce the permit requirement on the Comparative Oncology Laboratory, but that it attempt to locate other institutions performing harmful or fatal research on endangered species of primates and inform them of the permit requirement.

At the present time, decisions to kill primates belonging to endangered species in scientific research are made by a very narrow group: the scientist himself, and, in the event he is receiving U.S. government funds, a government "peer review" group. Such groups tend to approve each other's work. In many cases, scientific questions may interest the scientists and their reviewers and experimentation be permitted without due consideration to the conservation status of the animals involved. IPPL has studied carefully contract applications, progress reports, site visit reports, and other documents related to the gibbon research conducted at the Comparative Oncology Laboratory. No mention was made in the papers of the endangered status of the gibbons, although there are comments concerning the difficulty of procuring additional animals. No mention is made of measures taken to alleviate the pain and suffering of the dying gibbons. A review team recommended against further experimental use of the gibbons as early as 1974, but had no way to require a cessation of activities harmful to gibbons, apart from terminating the contract, which it did not choose to do.

IPPL opposes the use of primates belonging to endangered species in harmful or terminal research. However, it is difficult to learn which institutions are performing such research. Enforcement of the permit requirement would bring such research into the open and permit outsiders to comment on the research in question. Enforcement might also deter scientists from seeking to acquire endangered species for experimental use, or from harming animals already in their possession.

The 60 day notification period ends in late March 1980. At this time, our attorney will decide what further action to take, depending on the reaction of the parties concerned to the "Notice of Violation." IPPL wishes to express its gratitude to our excellent attorney, Laurens Silver, for the work he has already put in on this case.

ORIGIN OF COMPARATIVE ONCOLOGY LABORATORY GIBBONS

In March 1974, during routine visits to the Animal Facility of the SEATO Medical Research Laboratory in Bangkok, Thailand, a laboratory under the jurisdiction of the U.S. Army and commonly known as the "SEATO Lab," Shirley McGreal and Ardith Eudey were informed by both American and Thai personnel that 11 Thai white-handed gibbons Hylobates lar had been shipped in August 1973 from the facility to the Comparative Oncology Laboratory, University of California at Davis. Gibbons are the small, tree-living apes of Southeast Asia which form social groups resembling a monogamous family and actively defend a territory against incursions from other groups of the same species. Most capture of gibbons involves infants. Capture is effected by shooting of the mother in the hope that her clinging infant will survive both the shots and the resulting fall from high in the forest canopy. Under the Wild Animals Reservation and Protection Act

of Thailand (Buddhist Era 2503), gibbons are classified as protected animals and their capture, trade, and export is banned. The Royal Thai Forest Department may issue an exception to this ban, in which case a legal export of gibbons would have to be accompanied by the following documentation: (1) a health certificate issued by the Department of Livestock Development, (2) Thai Customs clearance papers, (3) an export permit issued by the Royal Forest Department, and (4) an export license issued by the Department of Foreign Trade, which is granted only after approval has been obtained from the Royal Forest Department.

In subsequent conversation, Shirley McGreal and Ardith Eudey learned from Pong Leng-EE, then Chief of the Wildlife Conservation Section of the Royal Forest Department, that the permission of the Royal Forest Department had not been secured for the shipment of 11 gibbons by the SEATO Lab. Mr. Pong re-

quested Dr. Eudey, at the time a graduate student at the University of California at Davis conducting field research on primates in Thailand, to investigate the circumstances surrounding the acquisition of Thai gibbons by the Comparative Oncology Laboratory upon her return to the United States.

The Comparative Oncology Laboratory is part of the School of Veterinary Medicine at the University of California at Davis. The laboratory is under the direction of Dr. Thomas Kawakami and is conducting research into a primate virus disease resembling leukemia.

The investigations conducted by Ardith Eudey at the University of California at Davis in 1974, and by her and Shirley McGreal in Bangkok in 1975, established the fact that the Comparative Oncology Laboratory had obtained three shipments of gibbons which had been illegally or "irregularly" exported from Thailand during 1973-1974. The assistance in these investigations of officials of the Royal Thai Government and associates of IPPL in Canada is gratefully acknowledged. IPPL began to report the results of these investigations in the November 1974 issue of the IPPL Newsletter, and the details of the three questionable shipments are summarized below.

On 16 January 1974 a shipment of ten unweaned gibbons, probably no more than one or two months old, was received by the Comparative Oncology Laboratory. These gibbons were shipped from Bangkok on 31 December 1973 by Pimjai Birds and Wild Animals and routed through Ark Animal Exchange, an animal dealership operated by Kenneth Clare in Vankleek Hill, Ontario, Canada. One infant was dead on arrival, and a post mortem examination revealed a shotgun pellet lodged in its skull. All infants were pneumonic on arrival, and only four of the ten survived. The four survivors were inoculated with a "C-type" virus. These gibbons were permitted to enter the United States accompanied only by a Thai health certificate for "80 Mynah Birds" and "10 Heads, White-handed Gibbon" (sic).

On 16 February 1974 a shipment of six older gibbons, some of which appeared to be former pets, was received by the Comparative Oncology Laboratory. These gibbons were shipped from Bangkok on 16 January 1974 by Pimjai Birds and Wild Animals and also routed through Ark Animal Exchange in Canada. These gibbons were permitted into the United States on a Thai health certificate for "1 heads Live Leopard Cats, 9 Heads Live Gibbons" (sic).

Both health certificates which accompanied the shipments of gibbons into the United States are fraudulent documents. A certificate for 80 mynah birds had been issued to Pimjai Birds and Wild Animals on 31 December 1973, but "10 Heads, Whitehanded Gibbon" does not appear on the official copy of the document on file at the Department of Livestock Development in Bangkok and had to have been added to the copy of the certificate which accompanied the shipment of gibbons. No health certificate for a shipment of any animals to Ark Animal Exchange was issued to Pimjai Birds and Wild Animals on 16 January 1974. Likewise, authorization of the two shipments had not been obtained by Pimjai Birds and Wild Animals from the Royal Forest Department, Department of Foreign Trade, or Thai Customs. The importation of the two illegal shipments of Thai gibbons into the United States probably was facilitated by the transshipment of the animals through Canada, which at the time had no laws to protect the wildlife of other countries and issued import permits for the gibbons.

On 9 August 1973 the SEATO Medical Research Laboratory in Bangkok shipped 11 gibbons to the Comparative Oncology Laboratory by Pan American on a U.S. Government Bill of Lading (H,1,152,361k). The gibbons entered the state of California on California Department of Public Health permit #353, issued 9 September 1972 in Berkeley, on which Ark Animal Exchange is identified as the "probable source" of the animals and the approximate date of arrival is listed as 20 September 1972. The SEATO Lab had indeed obtained an export permit for this shipment from the Thai Department of Foreign Trade but without authorization of the Royal Forest Department. The permit was obtained through the assistance of Thai Rear Admiral Samrit Jatinandana, Director General, SEATO Medical Research

Project, at the request of Lt. Col. Philip Winter, Director of the U.S. Army Medical Component, the larger military medical program of which SEATO Lab was part. In a memo to Jatinandana dated 27 February 1973, Winter noted that the U.S. National Cancer Institute (NCI) had contacted the U.S. Embassy in Bangkok requesting its assistance in securing export permits. A Department of State telegram originating in Bangkok and received by the U.S. Fish and Wildlife Service on 13 November 1974 states that the Embassy was contacted "to facilitate export and exempt shipper from any payment of export duties." Leonard Unger, former U.S. Ambassador to Thailand, in a telephone interview with Shirley McGreal admitted that he personally intervened to facilitate issuance of the necessary export papers although this was denied by Lt. Col. Winter in the telegram referred to above.

A shipment of 10 gibbons left Bangkok Airport for the Ark Animal Exchange on 27 March 1974. However, all ten gibbons died in flight between Frankfurt and Montreal. It is likely that these gibbons had been destined for the Comparative Oncology Laboratory.

In addition, the Comparative Oncology Laboratory had obtained one male and two female gibbons from the International Animal Exchange, which regularly imported Thai gibbons on Laotian shipping documents. The laboratory also obtained two gibbons from the Singapore animal dealer Y.L. Koh. Singapore has no gibbon population, but for many years served as a center for redistribution of gibbons smuggled to the island from its neighbor countries, Indonesia, Malaysia, and Thailand.

In July 1974 IPPL presented all evidence which it had then collected on the gibbon acquisitions of the Comparative Oncology Laboratory to the Division of Law Enforcement, U.S. Fish and Wildlife Service. The Division was requested to investigate whether the commercial shipments of gibbons from Pimjai Birds and Wild Animals violated the clause of the Lacey Act [18USC 43(a) and (b)] which forbids the importation of animals into the United States in violation of the laws of the country of origin. It was not until 1976 that all gibbon species (Hylobates spp.) were added to the U.S. Endangered List following their inclusion on Appendix I of the Convention on International Trade in Endangered Species (C.I.T.E.S.).

Section 43(c) of the Lacey Act refers to "the exercise of due care" and indicates that certain persons at the University of California at Davis had the duty to know whether or not their actions regarding the gibbon acquisitions were lawful. The culpability of personnel of the Comparative Oncology Laboratory was suggested to IPPL by evidence such as the following. (1) On 20 October 1972 Dr. Thomas (Tom) Kawakami sent a memo to the Purchasing Department of the University of California at Davis requesting a standing order ("open vendor and supply agreement policy") for the purchase of 24 gibbons annually. In the memo Dr. Kawakami states that "Gibbons are obtained primarily from Thailand but the Thai government refuses to release any gibbons at this time. Since they are extremely difficult to obtain, we are required to purchase the animals whenever they are available." (2) On 14 June 1974, Boyd Harrold, then manager of the Animal Colony of the Comparative Oncology Laboratory, when questioned by Ardith Eudey as to how the laboratory was able to obtain gibbons from Thailand where, he acknowledged, they are protected, volunteered the information that the gibbons were obtained through the black market in Thailand, bribes were paid at the airport (in Bangkok) in order to get them out of the country, and the animals were sent elsewhere before being shipped into the United States. Dr. Eudey specifically conveyed the Harrold comments to the Division of Law Enforcement, U.S. Fish and Wildlife Service in a statement notarized on 16 September 1975.

On 20 March 1975, Shirley McGreal received a letter from Clark Bavin, Chief, Division of Law Enforcement, stating that the case against the Comparative Oncology Laboratory had been dropped due to lack of cooperation by Pong Leng-EE. Mr. Pong had, in fact, sent information requested of him relevant to the

case in a letter dated 25 February 1975 to William D. Toomey, Counselor for Economic and Commercial Affairs, U.S. Embassy, Bangkok. In a subsequent letter dated 12 June 1975 in response to an inquiry by a concerned citizen, Mr. Bavin stated that the letter from Mr. Pong had been lost and implied that other agencies of the Thai government had provided information in conflict with that of Mr. Pong. However, the U.S. Embassy in Bangkok was never contacted nor instructed to obtain information from any other agency of the Thai government. The 16 April 1975 edition of the Aggie, the campus newspaper of the University of California at Davis, quotes Agent David Purinton of the Sacramento Bureau of the U.S. Fish and Wildlife Service as saying that the gibbons "were legally imported through channels and the permits had been obtained in both countries."

On 25 July 1975 in a letter addressed to Clark Bavin, Pong Leng-EE, then Director of the Wildlife Conservation Division of the Royal Forest Department, protested the inaction of the U.S. Fish and Wildlife Service in investigating the gibbon acquisitions of the Comparative Oncology Laboratory and the fact that this

inactivity had been attributed to his non-cooperation. Mr. Pong's protest, along with new evidence collected by Shirley McGreal and Ardith Eudey in Bangkok, was responsible for the reopening of the investigation during August 1975. The investigation was eventually closed again however because, according to Clark Bavin in a letter dated 22 August 1977, "little evidence was discovered" and it "failed to produce any evidence of prosecutable nature."

Although it appears that the Division of Law Enforcement, U.S. Fish and Wildlife Service, failed to pursue vigorously its investigations of the gibbon acquisitions of the Comparative Oncology Laboratory, IPPL's investigations succeeded in terminating the Pimjai Birds and Wild Animals - Ark Animal Exchange route of supply to the laboratory. On 14 June 1974 Boyd Harrold, for example, informed Ardith Eudey that the Comparative Oncology Laboratory had placed an order, which was never filled, for 20 more gibbons with Ark Animal Exchange. In addition, the information provided by IPPL to agencies of the Royal Thai Government permitted legal action to be taken against the offenders within its employ by Thai Customs.

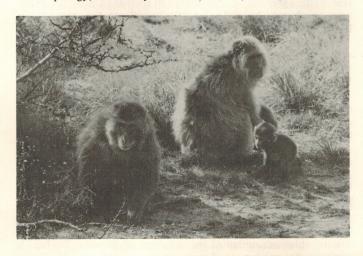
JAPANESE MONKEYS NEED HELP

A recent issue of the **Primate Supply Information Clear-inghouse Newsletter** (Issue number 103) announced the imminent disbanding and availability for sale of the Arashiyama West troop of Japanese monkeys. The troop, which was translocated from Japan to a 100 acre site near Laredo, Texas, in 1972 in an attempt to preserve its integrity, has endured a precarious existence since the death of its benefactor in 1973. The Dryden family has provided continuous financial support for the monkeys since that time, a burden which has resulted in the recent decision to terminate the project this year. Attempts to secure funds for support in the past have been difficult for a number of reasons, including the private ownership of the troop.

Some hope for the continuation of the Arashiyama West project stems from the formation of a non-profit organization, the Arashiyama West Institute, by Dr. Claud Bramblett, Department of Anthropology, University of Texas, to actively pursue solutions alternative to the disbanding of the troop. The Dryden family has agreed to donate the monkeys to the newly formed Institute and also to contribute to the costs of moving to a nearby location, 50 miles from the present site. The critical factor which may undo these plans is the cost of constructing an enclosure at the new site. Labor and some materials are being provided, but thirty thousand dollars in additional costs are anticipated.

The extensive history of study, begun in Japan, and continued over the past 26 years, as well as matrilineal genealogies dating back to 1954, make the Arashiyama West troop a uniquely

valuable resource for behavioral science. These monkeys are deserving of the consideration of all concerned with the preservation of nonhuman primates. To allow the disbanding of this troop of monkeys for use in pharmaceutical research would constitute an abysmal abuse, but a likely one, should sufficient funds not be raised. All contributions are tax deductible and may be sent to Dr. Claud Bramblett, Arashiyama West Institute, c/o Department of Anthropology, University of Texas, Austin, Texas, 78712.



CARE, CONCERN, AND COMPASSION NOT REQUIRED

The United States finances the operation of 7 Primate Centers holding a total of over 10,000 nonhuman primate inmates. Each center is affiliated with a university.

Currently, two of the Primate Centers are advertising for new directors: the Oregon Regional Primate Center, Beaverton Oregon, and the California Primate Research Center, Davis, California. Both centers have high natural and experimental primate mortality: in 1975, 232 primates died at the Oregon Center, 129 naturally and 103 experimentally, and 237 at California, 116 naturally and 121 experimentally.

The announcement for the directorship of the California Center notes that the Center has 49 core and affiliate scientists, 80 graduate students, and approximately 2,000 nonhuman primates. Qualifications sought are: success in administration, stature in science, significant contributions in a biomedical field, and an intent to remain active as an investigator. The announcement states that, "a background in some aspects of primatology is beneficial but not essential."

The Oregon advertisement notes that the Center has "230 employees and an operating budget of \$5.5 million." No mention is made of the number and species of primates held, even though the Center holds over 1,800 primates, of which close to 200 are lemurs of different species. All species of lemurs appear on the U.S. Endangered Species List in the category "Endangered." The only qualifications listed for the directorship were: "a doctorate degree and a strong record in research, administration, and education."

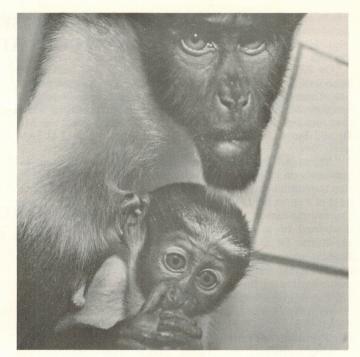
The interesting thing about these announcements is what they do not say. No mention is made of the need for a Primate Center Director to know about the conservation status of wild primates, or about research methods and techniques which do not require the use of live animals. Most significantly, care, concern, and compassion for the thousands of imprisoned primates over whose fates the new Directors would preside, are not mentioned as requirements for the positions.

MONKEY SMUGGLING

A writer for the Sierra Leone newspaper We Yone (26 September 1979) described the trucking of the bodies of hundreds of "dead and dried monkeys" from Sierra Leone into Liberia, where they are sold as food. The article alleged that, although the Liberian hunters were claiming to be "controlling agricultural pests," they were hunting large numbers of Diana and Colobus monkeys, both rare and harmless species. (The Diana monkey is listed as "Endangered" on the U.S. Endangered List). We Yone's article called on the Ministers of Agriculture and Forestry and the Ministry of Natural Resources to "Stop These Hunters Now!"

Ms. Daphne Tuboku-Metzger of the Sierra Leone Nature Conservation Association, in a letter to President Siaka Stevens of Sierra Leone dated 2 October 1979, requested that the activities of the Liberian monkey hunters be put to an end. She wrote that:

The Sierra Leone Nature Conservation Association urges the Government to put an immediate end to the slaughter of our wild monkeys by Liberian hunters. Monkeys have virtually disappeared from Liberia. With our government having committed itself to the conservation of our wildlife, urgent steps should be taken to protect the harmless and rare monkeys found in this country from destruction.



Diana monkeys

MONKEYS KILLED WITH WEED-KILLER

The Huntingdon Research Center, a private laboratory in Huntingdon, Cambridgeshire, England, is the largest user of primates in the United Kingdom. In 1978, it killed no less than 1342 primates in short-term toxicity experiments: 497 Crab-eating macaques, 586 Rhesus macaques, and 259 baboons. All the primates were imported.

Ten crab-eating macaques were poisoned with the weed-killer diquat at Huntingdon Laboratories in 1978. An account of this experiment was published in the journal **Toxicology and Applied Pharmacology** 51, 277-282 (1979). The purpose of the experiment was to evaluate the "acute toxicity" of this poison. The authors note that the substance has already been tested on dogs and rats, and state that, "accidental or suicidal poisoning by diquat in man is rare." This circumstance did not discourage the researchers from using diquat on monkeys.

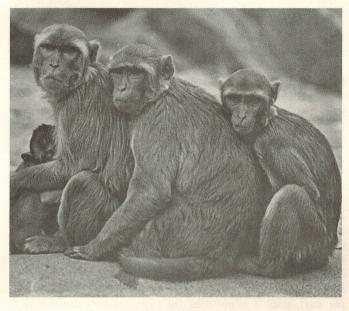
Ten imported crab-eating macaques were used in the experiment. The diquat was administered by stomach tube. The report notes that:

All monkeys vomited within 2 hours of dosing and showed diarrhea within 12 hours of dosing. The diarrhea was conspicuous for its green staining. Within the first 12 hours after dosing, 5 of the 10 monkeys became lethargic and subsequently collapsed. The most severely affected of these monkeys died during the night following dosing and a further three became comatose and died within 84 hours of dosing.

Any monkeys surviving at the end of 14 days were killed. No mention is made in the article of the use of any anesthetic or analgesia, even though the monkeys must have suffered agonizing pain. Autopsy of their bodies revealed severe distension of the gastrointestinal tract and ulceration of the stomach and large and small intestines. Large areas of the stomach and intestines showed "necrosis," and there was severe liver and kidney damage. No treatment of any kind was attempted on the monkeys. The report concludes that:

From the present study there is good evidence that the cynomolgus monkey would serve as a valuable animal for the study of diquat poisoning.

Since the authors admit that diquat poisoning is not a major human health problem, and that the substance has already been tested on dogs and rats, IPPL considers this experiment a senseless waste of primate life. IPPL also considers this project to be cruel and inhumane. One wonders about the circumstances in which the other 1332 primates were killed at Huntingdon in 1978, and what is going on there at the present time. A request for further information has been sent to the Center Director, and any information received will be communicated to readers in a future **Newsletter**.



Crab-eating macaques

PSYCHOLOGIST CRITICISES CRUELTY TO PRIMATES AT BROOKS AIR FORCE BASE

On 23 April 1979, a meeting of scientists was held at the School of Aerospace Medicine (SAM), Brooks Air Force Base, San Antonio, Texas, USA. The topic on the agenda was the Strategic Air Command's Low-Dose Radiation study, to which four monkeys had been assigned. Among those present was Mr. Donald Barnes, a psychologist who had been employed at SAM since 1964.

Although Dr. Barnes had participated in radiation experiments on monkeys for several years, he had started to question the continuing waste of monkey life at SAM. At this meeting, he spoke up on behalf of the four monkeys, commenting that the planned experiment would generate no new data that could not be discovered by a literature search or on the basis of past experiments. Dr. Farrer, Chief of the SAM Weapons Effects Branch, agreed that the experiment would probably produce no new data, but felt that it was valid nonetheless, according to a memorandum of the meeting. Nonetheless, Colonel Pickering, Dr. Farrer's superior, insisted that the experiment go ahead. The monkeys were given fatal radiation doses. It is not clear whether the colonel believed that the experiment had genuine scientific merit or could not tolerate criticism of his projects.

Not surprisingly, Mr. Barnes' days at SAM were numbered after this protest. He was clearly no longer trusted by the School's power structure, for when Dr. Shirley McGreal, Co-Chairwoman of IPPL, visited the School in September 1979, she was carefully steered away from the building in which Mr. Barnes worked.

On 11 January 1980, Mr. Barnes was dismissed from his position at the base. The reason is unclear. Mr. Barnes subsequently contacted the Texas office of the Humane Society of the United States and asked to be put in touch with IPPL. Some of his comments on the School of Aerospace Medicine's program follow.

Mr. Barnes' Statement

I can no longer perform experiments with animals doomed, by virtue of their participation in such experiments, to a very early death, if not to pain and suffering, during the final weeks and months of their existence.

From 1966 until mid 1978, I performed innumerable experiments with Rhesus monkeys, and 2 or 3 such experiments with baboons. In each experiment, 6 to 12 subjects were trained by the use of electric shock to perform a task of human design, i.e., not within the primate's normal behavioral repertoire. It is no simple task to train a Rhesus monkey to complex visual, auditory, and tactile-kinesthetic discrimination. Although the papers written to report such experiments claim that very low-level shock is utilized as reinforcement, (3-5 ma), such statements are simply untrue. It may be that 3-5 ma is sufficient for maintenance of acquired behavior, but such current levels are far below those required to initiate early responses approximating the desired behavior.

The shock generators are designed and manufactured by BRS (Behavioral Research Systems) and deliver at least 50 ma at 1200 volts. I couldn't even guess at the number of times I've seen these units used at full power to punish a slow learner or to otherwise "reinforce" undesirable behavior: well into the thousands: however, the learning process is replete with other dangers for the monkey as frustration leads to other self-destructive behaviors, e.g. biting hunks of meat from an arm or hand, pulling out hair until the subject is bald in accessible spots.

The restraint devices used are barbaric in themselves: e.g. metal couches with metal neck, belly, and ankle restraints. As the animal struggles to free inself, it often loses its teeth to the neckbar, gains severe abrasions on the abdomen (often wearing entirely through the abdominal wall), or so severely chafes its ankles that they bleed and become infected: and the animal is shocked and shocked again (sometimes hundreds and hundreds of times per day), until it either does the experimenter's bidding or is "flunked out" to another program requiring no training such as

laser beams in the macula of the eye or centrifuge work at g-forces which are permanently damaging.

Assuming the animals survive training (and many of them do not), my job was to determine their resistance to ionizing radiation, i.e. neutron, gamma, flash x-ray. In years past, I was ordered to keep a death watch on these irradiated subjects, which meant, simply, to see what happened until they died of radiation injury. Do you have any idea how miserable it is to die from radiation injury? I do, I've seen so many monkeys go through it.

At any rate, I finally got permission to sacrifice my objects after the experiment proper was completed (from 1 to 12 hours as a rule). We injected them with a compound designed to slow the heart gradually, thereby supposedly minimizing pain. I often did this myself in order to minimize suffering occasioned by clumsiness or ineptitude of technicians: on each occasion, I felt more strongly that I didn't have the right to kill these innocent creatures. As I became familiar with the use of the data gained from these experiments, I discovered that the data was not used to help Man in the struggle against his environment. . . the data was (and is) used to generate more worthless experiments, thereby killing and crippling more animals. I finally objected to doing any more experiments in this area.

Fortunately, Air Force interest in the effects of ionizing radiation began to wane although non-ionizing fields became of intense interest and my work became geared to determining the behavioral effects of drugs used as an antidote for nerve gas (organophosphate) poisoning. Given judiciously, these drugs (atropine, Benactyzine) are relatively harmless. This is not to say, however, that the training regimen is any less painful or damaging nor is the subject's pain a consideration after having been injected. That is to say, behavioral effects are partially measured by the number of shocks received by the subject and the subject must therefore suffer these shocks in order to demonstrate its inability to cope with the behavioral environment. I became more and more unwilling to subject these creatures to pain and, therefore, I became less effective in terms of my productivity (number of subjects trained and utilized in experiments).

I now find the logical sequence to be expected: "How can one determine the efficiency of an antidote without administration of the agent?" You guessed it! The next step is the administration of an organophosphate (GD, GB, SOMAN, etc.) followed (or preceded) by the various antidotes. This has been done at U.S. Army Laboratories (Edgewood, Aberdeen), but is now proposed for the School of Aerospace Medicine, Brooks Air Force Base. Enough is too much!

There are 8 subjects (8 Rhesus and 7 Crab-eating macaques) presently being trained by the Division of Radiation Science in Building 186 by Dr. Donald N. Farrer, Chief, Weapons Effects Branch, (RZW). These animals (and countless more to follow) were my responsibility until 11 January 1980. I can no longer assure their relative comfort, so I ask your help.

Further, there are 6-8 Rhesus monkeys being trained by Capt. T. Bennett, USA, on the 4th floor of Building 125 to a visual acuity task for purposes much like those enumerated above. These animals are also assigned to Dr. (name omitted) and his boss, Colonel (name omitted), and I will testify that neither of these men has the slightest notion about the degree of suffering experienced daily by these subjects although they both are aware of all of the conditions described above - in fact, are ultimately responsible for them

Other monkeys are being trained in Building 175 by Mr. G. Carroll Brown who works for Farrer. These subjects have an uncertain future at the moment but will undoubtedly be used in the RF 9 (radiofrequency) or the C.D. (Chemical Defense) programs, so that my comments herein pertain directly to them as well.

Some months ago, a representative from a Society for the Protection of Nonhuman Primates visited the School of Aerospace Medicine: she was carefully steered away from Building 186 (me). If you know of such a society, please inform me as I'd like to drop them a line.

A 3-year effort (\$750,000) is being contracted for by RZ, this effort will result in the mistreatment of dozens of monkeys. . .I can give logical and substantive reasons why the results of this effort will add not one iota of data useful to peaceful co-existence of humans (let alone all creatures) on this planet.

IPPL Comments

IPPL considers it deplorable that the School of Aerospace Medicine, which appears immune to outside criticism, should be unable to tolerate internal criticism from scientists concerned about the well-being of the monkeys and the significance of the "experiments." Compassion and concern should be encouraged rather than punished. It appears that an atmosphere of fear pervades the School, and this will be aggravated by Mr. Barnes' dismissal.

Members are requested to send a copy of this article to their Representative and Senators, asking that an investigation be initiated into the activities of the School of Aerospace Medicine.

Addresses: House Office Building, Washington D.C. 20515 Senate Office Building, Washington D.C. 20510

NOTES ON THE PROBOSCIS MONKEY by Sonia Jeffrey

Concern was expressed in the August 1979 IPPL Newsletter for the future of the Proboscis monkey. From my field observations collected over the last year in Kalimantan, Indonesia, I make the following comments. Should the Proboscis become a popular exhibit in zoos and other institutions, specimens would have to be collected from an already depleted wild population. Since they are specialized leaf-eaters, they have proven difficult to keep in captivity, and replenishment of zoo stocks would have to take place from the wild.

Proboscis are endemic to Borneo Island and are only found within a kilometer of the large rivers and their estuaries. Since rivers are the main means of communication in this country where roads are sparse, human settlements and farms tend to be along these rivers, which coincides with the Proboscis habitat. In the last decade river settlements have enlarged and spread inland due to the rapid increase in logging in Borneo, especially in Kalimantan (Indonesian Borneo) where Proboscis survive in greater numbers. Timber companies have located their base-camps on rivers which they use for rafting logs down to the coast. Sawmills and other wood-processing industries have been established along the rivers in response to the Indonesian Government's plan to industrialize.

The one-time subsistence farming by a few local Dayaks has been replaced by large-scale farming to supply the substantial imported population associated with the timber companies. The cutting of coastal and estuarine mangrove for chipwood production is further endangering Proboscis habitat. Proboscis are listed in the Red Data Book published by the International Union for the Conservation of Nature as a "vulnerable" species because Proboscis habitats are severely threatened.

Proboscis are relatively easy to capture and shoot. They habitually sleep in trees overhanging rivers at night. Some Dayak tribes eat monkey meat and shoot Proboscis from canoes using blowpipes. On some river systems in North Borneo, Proboscis have been completely wiped out by hunting.

On moonlight nights, Proboscis are easily visible as silhouettes against the sky while in their sleeping trees. They are captured in the following way. A landward party of men make loud noises and frighten the sleeping monkeys so that there is no escape on land. The monkeys, who are accomplished swimmers, jump into the river. A circle of men in boats waits for them and it is comparatively easy to fish them out of the water and tie them up. Luckily for the Proboscis, this method does not work where the trees are high enough to allow their escape back over land and over the land party's heads, as is the case in lowland riverine forest as opposed to mangrove and secondary forest.

The value of gibbons and orang-utans for export from remote areas of Kalimantan is well recognised by the indigenous people. Although these primates (together with Proboscis) are legally protected by Indonesian law, which makes it an offense to possess one, law enforcement is not effective even in the small sea ports, where the animals are sold for high prices to crew members of ships carrying logs and lumber from Kalimantan. Should Proboscis also become a valuable export, their numbers would suddenly decline due to the ease with which they may be captured, and the restricted nature of their habitat. Once those in mangrove areas had been eliminated, people would have to resort to methods of capture such as shooting mothers with infants (the practise by which orangs and gibbons are caught) to obtain the infant. This could be easily accomplished at dawn and dusk.

The future for this specialized primate looks grim both from the point of view of destruction of its habitat and the possibility of their becoming popular zoo exhibits, laboratory animals, or pets. Research is now being carried out to ascertain the conservation requirements of this little-known species in the hope that special areas will be reserved and maintained as Proboscis sanctuaries where the animals could live free from hunters and traffickers

INDONESIA PLACES TEMPORARY EMBARGO ON PRIMATE EXPORTS

According to a report in the Indonesian newspaper Antara (4 February 1980), the Government of Indonesia temporarily suspended all trade in primates not already protected by Indonesian law on 3 February 1980. Species involved are the Crab-eating macaque Macaca fascicularis, Pigtail macaque Macaca nemestrina, and Silver leaf-monkey Prestbytis cristata.

Indonesia presently has an export quota of 25,000 monkeys annually. Recently, it was discovered that animal dealers had tried to evade this quota by understating the number of monkeys in

their overseas shipments. A shipment of "100 monkeys" which arrived recently in Singapore was counted and found to contain 150 animals.

The embargo outraged Indonesia's animal dealers but won the approval of conservation organizations concerned at the massive increase in monkey exports from Indonesia following the ban on Rhesus exportation by India, and at the unsatisfactory conditions under which the trade is conducted.

APE RESEARCH CENTER OPENS IN GABON

In December 1979, the International Center for Medical Research was formally opened in Franceville, Gabon. Franceville is a small town in the interior of Gabon. It was chosen as the site of the Center because it is the home town of President Bongo of Gabon.

The Center was established with financial help from a French oil company, and with encouragement from many French scientists. The Center was established with the primary goal of solving the country's problem of human infertility, which is considered a serious handicap by Gabonese politicians. Visitors to the Center report that it is huge and that the caging is modern and spacious.

Eight baby gorillas have been obtained, of which six have already died. The Center also holds 20-30 chimpanzees. The origin of the baby gorillas is unclear. In some cases, the mothers are reportedly shot for food, and the "leftover" babies turned over to the Center.

It is not clear why the baby gorillas are not eaten, assuming the mothers are really being killed for food. Should the Center be paying for the baby gorillas, it is possible that mother gorillas would be hunted solely for their babies. Unless the Center staff monitors carefully the origin of all gorillas offered to the institution, the existence of the Center could be potentially dangerous for Gabon's dwindling gorilla population. It is essential that no payment be made for gorilla "orphans" and that, if it is found that the gorillas have been illegally acquired, the responsible persons be prosecuted.

In conjunction with the opening of the Center, a symposium on the status of the gorillas in the wild and their reproductive physiology was held. Simultaneously, a symposium meeting in Libreville, the capital of Gabon, concentrated its attention on the status of human infertility.

With the world's population standing at over 4,000,000,000 and likely to double in 35 years, the establishment of a Center where highly endangered apes are to be used to increase human fertility appears somewhat bizarre.

IPPL member Heather McGiffin looked into the Gabonese "population problem." Dr. Baldwin, of the U.S. Bureau of the Census, informed her that a census held in Gabon in 1966 produced a rounded figure of 468,000 and that a subsequent census held in 1970 resulted in a rounded figure of 500,000, making Gabon's official population growth rate 1.7% (in contrast to the present U.S. growth rate of 0.8%). However, Dr. Baldwin pointed out that some other factors besides natural population growth had probably speeded up Gabon's population increase in the 1970s:

the population influx from neighboring Equatorial Guinea resulting from the brutal dictatorial rule in that country, and the influx of migrants following the "oil boom" in Gabon.

Ms. Pat Rowe of the International Demographic Center, estimated Gabon's current population to be 637,000. She stated that Gabonese women did have a low fertility rate compared with other African countries - but added that several factors were responsible, including a high incidence of venereal disease, poor medical care and health facilities, and malnutrition which leads to high infant mortality.

However, even if human infertility were indeed a major problem for Gabon, there is nothing to indicate that incarcerating gorillas and chimpanzees would in any way alleviate the problem. Neither species is prolific.

The IPPL Newsletter (December 1979) noted the serious problems faced by both chimpanzees and gorillas in Gabon: logging, even in national parks and reserves, is destroying their habitat, and, in spite of the existence of laws, uncontrolled hunting of wildlife by pleasure-seekers and meat-eaters is destroying many species. In this context, the decision by the French oil company to finance an ape facility seems somewhat bizarre. The funds spent on the Center could have been used to help save Gabon's wildlife from extinction. The incarceration of highly endangered gorillas and chimpanzees in order to help Homo sapiens increase his population so he can take over more ape habitat and eat more apes has provoked negative reactions: Henry Heymann, Secretary of IPPL, commented:

Since it is the excessive growth of human population which is annihilating the gorilla, this situation has a terrible irony. The gorillas are being compelled to contribute their lives, health, freedom and sanity to the expediting of their own demise. This is like the concentration camp victims being forced to dig their own graves.

Dr. Paul Ehrlich, Bing professor of Population Studies at Stanford University, told IPPL: "I'm violently opposed to the removal of more gorillas or chimpanzees from the wild for any reason."

At present, it is not clear whether the "fertility studies" proposed for the gorillas and chimpanzees at the International Center for Medical Research will involve observation only, or will include harmful procedures. Further details have been requested from the Center's management.

MONKEYS NOT NEEDED FOR TESTING OF INACTIVATED POLIO VACCINE

When tropical countries ban trade in primates, they are often confronted with the argument that they are depriving Western children of protection from polio, since monkeys must be killed to test the vaccine.

This argument is no longer valid. According to a World Health Organization (WHO) Expert Committee that met in 1979, the monkey safety test is not necessary for inactivated polio vaccine, since accidental polio resulting from vaccination only occurs when the live vaccine is used. (The live vaccine is now the main cause of polio in the United States.)

However, the government regulatory agencies are reluctant to change the legal requirement for monkey testing of all polio vaccine. Commenting on this situation, Dr. Walter Hennessen, President of the International Association of Biological Standardization, stated in an address to the IABS's 1979 Conference:

It seems remarkable that when, after accumulation of vast evidence, experts recommend abandoning a monkey safety test, . . . these tests are still required by national control authorities.

IPPL has been unable to obtain a copy of the Expert Committee's full report. It appears that primate politics may dictate the suppression of the report by WHO, since the argument that countries should export monkeys because they are needed for polio vaccine testing is the one most commonly used by international organizations and user countries. Although a spurious argument, it is too useful to lose.

Dr. Jonas Salk, developer of inactivated polio vaccine, has confirmed to IPPL that it would be possible for the monkey safety test to be dropped for inactivated polio vaccine, although not for the live vaccine.

THE GREEN INDONESIA FOUNDATION by Regina Frey

The street is hot and dusty. A skinny little boy drags a civet along on a rope tied tightly around its neck. The civet wildly tries to free itself by biting into the rope and pulling backwards, straddling its four feet into the mud of the road. But, with a strong jerk of the rope, the boy walks on, laughing as the animal whirls through the air. The civet coughs, its speckled fur looks dull and dirty.

The boy notices me watching him, and comes up to me, dragging the civet along. "Two thousand rupiah," he says, expectantly. I shake my head and walk on.

Nature conservation in Indonesia - a seeming contradiction about which this incident shows much. The most pressing problems - poverty and ignorance - form a vicious circle, hard to break. A similar situation exists in most developing nations.

Populations are increasing fast and utilization of natural resources increases simultaneously. Most wild animal populations dwindle at an alarming speed as their habitats shrink. But it is very difficult to get poor people aware of this. How can they be expected to stop trading animals? Shouldn't their problems come first?

Failures in conservation are often due to overlooking the socio-economic aspects, ignoring the complexity of the problems. Such one-sided approaches often create hostile feelings against the idea of conservation. Communities around nature reserves feel unjustly deprived of the right to utilize forest resources in traditional ways. They may feel that the government considers their well-being less important than that of the animals. Such attitudes block the development of feelings of responsibility and commitment which are so essential if conservation is to accomplish anything.

Yes, here in developing nations we are forced to look upon nature conservation the way we always should - the harmonious co-existence of all living beings, including Man.

Here education comes in as a very important and powerful tool in conservation. Education generates knowledge and knowledge leads to appreciation. One cannot be concerned about something if one doesn't know its value. Education can open people's eyes to the vital functions of the forest in watershed management and soil protection. Such awareness is a prerequisite to introducing conservation strategies into a country's development planning.

Governments must conserve natural areas, not only for the sake of wildlife, but for the survival of their people. Consumers of wildlife and natural resources within as well as outside developing countries must become aware of their trigger function in the cause of conservation. As long as a high demand persists, these resources will be tapped. One would think it would be an easy task to convince users of wildlife and forest products that it is in their own best interests not to wipe out these resources by over-exploitation, but this has not proved to be so.

In the area of education, many different approaches must be

tried. As yet, government agencies cannot fill these needs and **private initiative** is called for. That is how the "Green Indonesia Foundation" (Yayasan Indonesia Hijau) came into being. It was founded on 12 January 1978, by a group of people seriously concerned about the deterioration of the natural environment, especially the rain-forest of Indonesia. The "Green Indonesia Foundation" has taken up the challenge of the educational approach to conservation. Its target group is the youth of the country, the decision-makers of tomorrow. YIH believes that they will accept the idea of conservation more readily than other age-groups.

A number of activities have been initiated, aimed at generating knowledge among young people of the indigenous fauna and flora of the country and at instilling an awareness of conservation problems. YIH started with the publication of a wildlife journal called "The Voice of Nature" (Suara Alam), which is distributed free of charge to all high schools, universities, youth organizations, and nature societies throughout the country. It is aimed at young people and also intended for use by teachers. The journal also serves as a means of communication among nature societies and youth organizations all over the country. So far, its publication has been somewhat irregular, but now, thanks to the cooperation of one of the country's leading magazines, we hope to publish it on a bi-monthly basis.

Besides the magazines, YIH has established an extensive photo library and has produced a number of audio-visual programs on Indonesian wildlife and wild places. Besides their educational value, they are a source of income for YIH, as they are seen by a wide range of audiences.

YIH also tries to introduce city youth to the country. Most young people, especially those living in the major cities, have no opportunity to visit a nature reserve. YIH works with a local travel agency. It helps the agency plan trips to nature reserves for foreign visitors. In turn, the agency provides special tours for local youth.

YIH's plans for the future include developing a mobile audiovisual unit in Jakarta to take nature programs into the schools. Plans are under way to establish a visitor's pavillion at the excellent Ragunan Zoo in Jakarta, with exhibits about the local fauna and flora.

But so far, these can only be plans, because YIH's budget is very small. YIH wants to be self-reliant, but this will take some time. In the meantime, we would appreciate support from conservationists around the world. At present, most of our members and sponsors are from Indonesia. Indonesia still has considerable forest areas and wildlife left. There is a chance to save them - but we need your help.

Note: Readers interested in joining YIH should contact Yayasan Indonesia Hijau, Sekretariat, Tromolpos 3572/JKT, Jakarta, Indonesia. Membership dues start at \$10 per year. Donations can also be made through IPPL. Please mark your cheque clearly "For the Green Indonesia Foundation."

NEWS OF MOUNTAIN GORILLAS

Between 20 September 1979 and 23 January 1980, IPPL-assisted anti-poaching patrols in Rwanda cut and confiscated a total of 384 traps. One duiker was released alive. Many of the traps were set in gorilla territory.

A silverback male gorilla was shot to death on Mount Sabinio in December 1979. Two known poachers were arrested in connection with the incident. Dr. Dian Fossey reports that these men had

also been involved in the killings of Uncle Bert and Macho, of Group IV.

Dr. Fossey is now caring for an infant gorilla called "Charlie," confiscated from local traders, who were arrested. Charlie, a female, is extremely mischievous, and, according to Dr. Fossey, "into everything in the house." Dian hopes that this gorilla will eventually be accepted by a wild group.

GOLDEN MONKEYS VISIT HONG KONG

From November 1979 to February 1980, a pair of Golden monkeys **Rhinopithecus roxellanae** were exhibited at Ocean Park, Hong Kong. The monkeys were on loan from Peking Zoo, China. This is the first time this species has been exhibited outside the People's Republic of China.

The animals were a great attraction during their stay, especially since 1980 is the Year of the Monkey in the Chinese lunar calendar. Their appearance is striking: brilliant gold coats, blue faces, snub noses, and in the male, black and white genitals.

The Golden monkey is an internationally recognized endangered species. It is found in several regions of China: Central Szechuan, Kansu, Southern Shansi, Southwest Yunnan and Northeast Kweichow, which approximates the range of the panda. In the summer, the animals stay at high altitudes, and in the winter move to lower elevations. They are able to endure harsh weather, partly because of their long coats.

Golden monkeys' preferred food is mulberry leaves and shoots: they enjoy elm leaves, alder leaves, alfalfa, reeds, bamboo leaves, and green vegetables. They also catch insects. In addition, the Peking Zoo monkeys eat carrots, tomatoes, apples, pears, eggs, and bread. Vitamins A and D and calcium are added to their diet.

The Golden monkey has been exploited in traditional Chinese medicine, being considered a source of a medication for rheumatism. In addition, they have been exploited for their beautiful coats, which were made into garments. During the Manchu dynasty, wearing of Golden monkey clothing was a privilege reserved only for Manchus.

Very little is known about the ecology or behavior of the Golden monkey. No census data is available. Only three zoos in China are known to exhibit the species: Shanghai, Canton, and Peking.

MONKEYS SHOT IN HEAD

The School of Neurosurgery, University of Chicago, Chicago, Illinois, USA, treats injured humans - and shoots monkeys in the head. A report in the **Journal of Neurosurgery** 50:423-432, 1979, describes an experiment in which 28 Rhesus monkeys were shot in the head. The authors cite a previous experiment performed by themselves involving shooting monkeys in the head, which produced "injuries so severe that 45% of the animals receiving the standard missile injury (velocity of 90 m/sec) had died within 6 hours."

The monkeys in this experiment were divided into three groups. Group I monkeys were "wounded with a missile traveling 90 m/sec." and started receiving (mannitol) treatment 15 minutes after injury. Group II monkeys received a gunshot wound with a missile traveling 90 m/sec. and were treated one hour after injury. The seven monkeys in Group III were wounded with a missile traveling at 180 m/sec. Some of these monkeys were treated at 15 minutes but none at 1 hour - since all untreated monkeys were dead.

Very few monkeys were alive six hours after injury. Of these, three were allowed to wake up from anesthesia. Two survived with hemiparesis but "the other was lethargic at 2 days and was sacrificed because of inability to care for himself." It is not clear whether this unfortunate animal was killed on humanitarian grounds or because the scientists were too lazy to care for the once healthy monkey they had reduced to this condition.

The scientists report that their "experiment" confirms something already known: "Mannitol has long been accepted as a reliable agent in the reduction of raised ICP (intercranial pressure) from both traumatic and nontraumatic causes."

U.S. taxpayers' funds were used to pay for this research, through National Institute of Neurological Diseases Grant No. NS-07376. Readers who feel this is an inappropriate use of their taxes should communicate their feelings to their Representative (House of Representatives, Washington, D.C. 20515) and Senators (Senate Office Building, Washington, D.C. 20510).



Golden monkey

PRIMATES CRASHED TO DEATH

The Organisme National de Sécurité Routier (ONSER), Bron, Lyon, France, is using baboons and crab-eating macaques in carcrash experiments. These experiments have been condemned by French and international animal welfare organizations.

According to Dr. Anton Chapon, the ONSER Laboratory's Medical Supervisor, 31 baboons have been killed in the crash experiments since the experiments began in 1971. Most of the baboons had been provided by the British animal dealer R. D. Hackett of Shamrock Farms. (It is unlikely that Hackett's activities were known to International Primatological Society members when they elected him Vice-President in 1976).

The primates are used to study brain and chest injuries resulting from impact. The animals are strapped into a simulated vehicle which is driven into a wall. At present, the ONSER crash simulator cannot exceed 60 km. per hour, but a new device is under construction that can simulate high-speed crashes.

In a new experiment initiated in 1979, electrodes are fitted into a macaque's skull prior to placing the monkey into a machine that jerks its head 60° forward to produce brain haemorrhage. Fifty macaques are scheduled to die in this project in 1980.

Dr. Murray Mackay, head of the Accident Research Unit at Birmingham University, England, questioned the value of ONSER's experiments, which he considered to be "of marginal importance" because "there is not a very precise correlation between humans and animals because of basic anatomical differences."

Similar experiments have been conducted on primates at the Highway Safety Research Institute, University of Michigan, USA, and the Wayne State University, Detroit, Michigan, USA. (See IPPL Newsletter, April 1978).

Readers wishing to comment on these experiments should contact the French Ambassador in the capital city of their country of residence.

HEAVY MORTALITY IN SOUTH AMERICAN PRIMATE PROJECT

IPPL has learned that there has been heavy mortality among squirrel monkeys and tamarins caught as part of a United States government "conservation" project in South America. Primates have been dying of malnutrition in a cockroach and rodent-infested facility close to Iquitos, Peru. In addition, many owl monkeys have been killed when efforts were made to catch them using the paralytic poison, curare.

The United States National Institutes of Health (NIH) suddenly became greatly interested in the "conservation" of South American primates following an incident which took place in Peru in December 1974. At that time, the Government of Peru ordered the release in the jungle of the survivors of 800 White-moustached tamarins Saguinus mystax. The animals had been caught for export to the Merck Sharp and Dohme pharmaceutical company in West Point, Pennsylvania, USA, which planned to kill them in hepatitis research. Peru's ban on primate exportation meant that the three major countries of Amazonia (Colombia, Brazil, and Peru) had all adopted a policy of legal protection for primates. (As late as 1972, Peru had exported 25,532 primates to the United States and Colombia 17,006).

Shortly after the Peruvian incident, Dr. Frank Perkins, Chief of Biologicals at the World Health Organization, expressed his outrage at the bans in a speech before the International Association of Biological Standardization. Stating that "the [Peruvian] ban is serving neither conservation nor scientific research," he blamed Peru for forcing Western countries to patronize the black market to get primates, and for the deaths of primates trafficked on the black market. Dr. Perkins, whose own daughter is a British animal dealer specializing in the supply of South American primates for biomedical research, did not criticize those scientists who patronize the black market.

At this point, with mass importation of South American primates ended after long years of massive imports for both laboratory and pet trades, the United States decided to try to interest the South American governments in a form of "primate conservation" more agreeable to primate users. Drs. Joe Held and Benjamin Blood of the U.S. Interagency Primate Steering Committee flew to Peru to try to interest the government in a program including performance of primate censuses followed by controlled cropping of "surplus" animals, and establishment of primate breeding centers in the habitat countries.

The Merck Sharp and Dohme Company was just as anxious as the United States Government to reopen the primate trade. The company therefore joined the U.S. National Institutes of Health in providing funds to the Pan American Health Organization (PAHO), the American regional grouping of the World Health Organization (WHO), to arrange "The First Inter-American Conference on Conservation and Utilization of American Nonhuman Primates in Biomedical Research." The conference was hastily arranged and took place in Lima from 2-4 June 1975. Thirty-five Peruvian scientists and government officials attended, as well as a few individuals from Brazil and Colombia. Scientists from the United States presented papers of a complex technical nature clearly intended to impress the listeners, even if they did not understand the speeches, with the desirability of providing monkeys to these scientists who had flown so far to tell them about their work and need for monkeys.

The published account of the Conference contained a list of 12 "Recommendations," including one that the South American countries should establish Primate Breeding Centers. IPPL has learned that these "Recommendations" were written by U.S. National Institutes of Health officials. Those attending the Conference had no opportunity to debate them or vote on them. In any case, those attending the Conference had no authority to commit their countries to any course of action. Nonetheless, these "Recommendations" were incorporated into the Conference **Proceedings.**

On 24 June 1975, just 3 weeks after the end of the conference, the U.S. National Institutes of Health and the Pan American Health Organization signed a contract entitled "Planning and

Consultation Services to Establish a Nonhuman Primate Program." The contract, numbered NIH-RS-75-31 provided PAHO with the sum of \$249,505 (U.S.) for three years beginning 30 June 1975. Dr. Luis Melendez was named as "Principal Investigator" and Dr. Benjamin Blood, of the U.S. Interagency Primate Steering Committee, as "Project Officer." Dr. Melendez left the project in 1976 and was replaced by Dr. Manuel Moro. In 1979, Dr. Blood was replaced by another NIH veterinarian.

On 9 April 1979, IPPL submitted a Freedom of Information Act request to the National Institutes of Health for documents related to the contract. After 9 months of delay and obstructions, NIH provided a few of the requested documents to IPPL. Signifi-

cant extracts from these documents follow:

Justification for Noncompetitive Procurement, 6 May 1975. This Justification explains the reasons for exempting this contract from normal competitive bidding. The Justification describes New World primates as a "vital tool" for researchers, and notes that "the more extensive testing of drugs under contemplation by the Government will increase the demand for these test models still further." Therefore, the U.S. Government was seeking to contract with PAHO "to provide planning and assistance in the planning and development of programs of primate production and conservation." PAHO was the preferred contractor because of its "continuing reliable political acceptance" in South America. However, the project would be useful "in the furtherance of NIH goals."

Work Requirements Statement, 12 May 1975. PAHO, functioning as an "independent contractor" rather than as an agent of the United States Government, was to aid South American countries in "planning programs designed to meet urgent needs for measures to assure the provision of animals for biomedicine."

PAHO was to plan programs including:

measures in support of primate production through the establishment of breeding stations and/or through management of free-living populations. . . animals trapped for breeding but determined unsatisfactory for that purpose. . . will be made available for biomedical research with the United States Public Health Service to receive first option.

The Public Heath Service would pay PAHO a "service charge not to exceed U.S. \$125 per animal." In addition, "it is intended that the primate program in each country shall be self-financed as soon as possible by funds received from primates produced and made available for bioscientific use. . .or from national budget sources." The United States would welcome contributions to the expenses of the project from other foreign governments, which would become entitled to "a share of the primates made available for export."

Technical Proposal submitted by PAHO, 27 May 1975. PAHO agreed to the NIH work requirements, and stated that the first stage would be to help the Government of Peru to establish a primate station in Iquitos, a town located on the Amazon River. PAHO proposed to hire 3 monkey-trappers, who would be expected to catch 1,500 monkeys per year, of which 1,000 would be exported to the United States.

First Quarterly Report, October 1975. The report states that Mr. William Kingston of the United Kingdom has been hired as Project Manager for the Breeding Station. A site had been selected for the breeding center: it was a plot of land owned by the Institute for High Altitude and Tropical Research (IVITA) located 3 miles from Iquitos and conveniently close to the airport. The paragraph headed "Problems Encountered and Possible Solutions" notes that NIH/PAHO had not provided funds to establish a laboratory in association with the planned primate station. However, Dr. Benjamin Blood, Executive Director of the U.S. Government's Interagency Primate Steering Committee who was serving as "Project Officer" had had a bright idea to solve the problem.

Mutual discussions with the Project Officer, Dr. Benjamin Blood, indicated that a good and prompt solution for this problem would be to obtain some monkeys as soon as possible. They would then be sold to the National Institutes of Health and the funds thus obtained could be invested in the establishment of laboratory facilities for the breeding station.

Second Quarterly Report, January 1976. The Principal Investigator notes that it is essential to set up a laboratory for the planned breeding station, and that \$30,000-40,000 (U.S.) would be needed for that purpose. Therefore:

> The Principal Investigator has suggested to the Peruvian officers that the obtaining of funds for this purpose could be sought through the selling of 400-500 monkeys at a price of \$100-\$120 per monkey. They [the Peruvians] have agreed to such a suggestion.

The price agreed to was less than half the market price for the species in question. The report also notes that Dr. Melendez, Principal Investigator for the project, had travelled to Colombia in November 1975 "to assist the government authorities in the preparation of a letter of agreement between Colombia and the Organization for the establishment of a National Program in Primatology." Dr. Melendez proceeded to Brazil to discuss plans to establish a primate breeding station there.

Third Quarterly Report, April 1976. The report notes the arrival of Mr. Kingston in Iquitos in March 1975, nine months after the start of the project. However, Peruvian officials were stalling

over export of primates. Therefore:

The Principal Investigator insisted to the Peruvian officers during February 18, 1976, on the necessity to have laboratories built in as short a time as possible. . . They [the Peruvian officers] indicated that it was going to be very difficult to obtain monkeys to be sold abroad. . . The Principal Investigator stressed that PAHO does not have any special funds for this purpose [laboratory construction] and that the Government of Peru, following the recommendations of the agreement signed between the Government of Peru and the Organization, ought to find a solution to this problem.

The Peruvian government officials of the project suggested that PAHO send a letter to unnamed "high officials" in the Government of Peru, asking that the Government itself provide the funds. Faced with a choice between exporting monkeys or providing the funds itself, the Government would be likely to yield on the export matter and allow export of primates. The Peruvians who made this suggestion to PAHO are not identified in the report. It is likely that the United States would have "found" the money for the laboratory if Peru had refused either to provide the funds or export the monkeys. Eventually, the Government of Peru yielded on this matter of principle. The insistence by NIH/PAHO on export of monkeys before the performance of censuses and the establishment of successful breeding colonies indicated that these organizations' claims that the project's goal was "conservation" were sheer hypocrisy.

Dr. Melendez visited Brasilia in February 1976. He worked on the preparation of a PAHO/Government of Brazil agreement, and on preparation of a preliminary budget. The Government of Brazil was reported to have decided to invest U.S. \$1,000,000 in the project, a development Dr. Melendez found "most encouraging" since the United States had expected to pay for the establishment of the Brazilian Center. Now the Brazilians were ready to pay to incarcerate their own primates, even though there were conservation projects of far higher priority than establishing colonies of primates needing funds in Brazil, such as protecting large areas of the Amazon rain-forest, which is now being torn down, with United States' companies playing a large role in the destruction.

First Annual Report, July 1976. After nine months of little accomplishment, Melendez reports that "the last quarter can really be considered the period in which the first phase of the Primate Conservation and Breeding Center is beginning to operate." The land for the center was being levelled and construction started. However, a "serious handicap" was harming the project - the lack of a car. Permission had been requested from PAHO to use funds left over from the year's budget of \$86,491 to purchase a

Dr. Melendez reports that the Government had agreed to allow export of monkeys to pay for the laboratory. After Peru's original ban on export of primates for commercial purposes (1972), a Resolution from the Office of the President had been required to export primates. (The Merck Sharp and Dohme Company had used a university to obtain animals). However, that requirement had subsequently been lifted and, by 1976, only a Resolution from the Minister of Agriculture was required. The report notes that:

> The Principal Investigator, while in Lima 5-12 June 1976, assisted the authorities of the Direction of Forestry and Wildlife in the preparation of the resolution to be signed by the Minister of Agriculture to release the monkeys to PAHO.

To IPPL, it appears most improper that a PAHO/NIH employee should be drafting resolutions for foreign governments to sign. In the report, criticism was levelled at Mr. Kingston: "[He] is not a veterinarian: he lacks, therefore, the necessary knowledge in clinical veterinary medicine."



Cottontop tamarin Photo Sy Oskeroff for Los Angeles Zoo

The year's activities were summarised: 1) recruitment of personnel, 2) permission to export monkeys, 3) getting land for the primate station, and 4) getting temporary housing for the 500 animals while awaiting export. Although project documents talk of "conservation," the word was not even mentioned in this list.

Year 2, First Report, September 1976. This report notes that, "On August 19, 1976, the Government of Peru authorized by "Resolution Suprema #0189-76-AG/DGFF the exportation of 500 monkeys."

Progress on constructing the monkey "shelters" was described.

The first monkey shelter to house 50 pairs of Saguinus mystax has been finished. The shelter has been adequately fitted with concrete floors and walls with wire mesh to allow the maintenance of the natural environmental conditions.

Dr. Melendez appears to think that the jungle has concrete floors. Year 2, Second Report, December 1976. A new Principal Investigator, Dr. Manuel Moro of PAHO, replaced Dr. Melendez. Reports submitted by Dr. Moro are even briefer than those of Dr. Melendez, usually consisting of 11/2-2 sides of double-spaced type. Dr. Moro reported that the colony now consisted of 50 pairs of White-moustached tamarins. A "shelter" for squirrel monkeys was under construction. On 29 December, a meeting was held at which all connected with the project within Peru met with 4 PAHO staff members to set priorities for the program. These were established as 1) developing the breeding center, 2) "intensive management" of monkeys on islands in the river, and 3) "extensive management" in several "protected areas." A unanimous decision was made to give "first priority" to the development of the breeding center. "Conservation" was not a priority. In addition,

in order to obtain funds for construction of the clinic, water facilities, library, more monkey shelters, increasing number [sic] of monkeys will be authorized by government to be exported in the coming years.

Year 2, Third Report, March 1977. Seventy-five White-moustached tamarins were exported to Miami, U.S.A. during this period. However, further trapping of the species was suspended; "due to rising river levels, there is a high incidence of females with dependent young which are invariably lost if the parents are trapped." The squirrel monkey "shelter" was completed during this period. Like the other "shelter," this also had "concrete floors and walls with wire mesh." The unit was designed to house 100 squirrel monkeys.

Year 2, Annual Report, June 1977. Two "shelters" were in operation. One "quarantine room" had been built (80m₂). Although no morbidity and mortality data were reported, "Beginning April, a nutritional problem was observed particularly in the S. mystax." Dr. Joseph Knapka of the National Institutes of Health flew to Iquitos to try to solve the problem. Among other things, he recommended a dry biscuit diet. During this report period, 200 squirrel monkeys were exported to Miami. Four trapping parties were to resume trapping of S. mystax in August.

Year 3, First Report, September 1977. Dr. Moro reports that "On July 13, 1977, the Ministry of Agriculture of Peru authorized by "Resolution Ministerial No. 01238-77-AG-DGFF" the exportation of 1,000 monkeys, (500 White-moustached tamarins, 400 Squirrel monkeys, and 100 Saddle-back tamarins Saguinus fuscicollis). During the period, 170 animals were exported from Iquitos to Miami (100 White moustached tamarins and 70 Saddle-back tamarins).

Establishment of a center in Colombia was being delayed by bickering over choice of a location.

Year 3, Second Report, December 1977. Some improvement in the health of the tamarins was noted: "no more cases of depigmentation were observed, but so far the animals already with depigmentation did not recover fully the normal color." The Squirrel monkeys were "in fair condition." These health problems had not even been mentioned in previous reports. They had not deterred the construction of a third primate unit - to hold 100 pairs of White-moustached tamarins. The report notes the construction of a well "to assure the supply of water for the station." It is not clear why such a well was not constructed before the colony was set up. The report also notes the acquisition of "several pieces of large equipment" at the station: "two boats, three motors, and a large generator." No further details of the equipment are provided. But, best of all, "the car for the Station will arrive in Lima and will be shipped to Iquitos as soon as possible."

Eight shipments of monkeys left for Miami during the period totalling 145 Squirrel monkeys, 170 Squirrel monkeys, and 30 Saddle-back tamarins.

Colombia was still undecided on a location for the primate station, and the Government of Brazil had chosen the Evandro Chagas Institute in Belem as the site of its Primate Center.

Year 3, Combined Third and Fourth Reports, June 1978. It appears that writing a 1½ page report every 3 months was considered too gruelling by the Principal Investigator, so two report periods were combined in a 1½ page report. Dr. Knapka's special monkey biscuit was being fed to the monkeys - but was meeting with severe resistance by the tamarins, even when soaked in condensed milk laced with sugar.

In December 1977-January 1978, 22 Squirrel monkeys were born. From 27 January 1978 to 2 February, Dr. Robert Whitney of NIH visited the Station in the company of 3 scientists from the Center for Disease Control, Phoenix, USA, "to determine the feasibility of constructing and operating a marmoset facility that would provide a source of infected liver tissue" for Hepatitis A studies. Preparation of such material would involve the killing of tamarins, this introducing a new aspect to NIH's "conservation" project.

A new boat called the "Indiana" with 9 tons capacity was purchased for the project.



Emperor Tamarin
Photo Sy Oskeroff for Los Angeles Zoo

Year 4, First Report, September 1978. The report notes that construction of the laboratory and offices had been started in July. A team of sanitary engineers had visited the facility in August 1978 to discuss waste disposal. They determined that, "Considering that the residues produced in the Station are about 20 kg. per day and about 2 kg. of dead animals per week, the construction of an incinerator is not necessary." However, "the residues must be buried in a proper place." They also recommended that the station get connected to the city water supply and construct its septic tank at least 100 meters from the well.

On 2 August 1978, Peru issued a further resolution allowing the export of 450 more primates: 200 White-moustached tamarins, 200 White-lipped tamarins, and 50 Pygmy marmosets Cebuella pygmaea. The Pygmy marmoset was at that time listed on Appendix I of the Convention on International Trade in Endangered Species. It was removed from Appendix I to Appendix II in March 1979 at the request of the Government of Peru, which apparently wished to export the species.

Year 4, Second Report, December 1978. The report notes that the original NIH/PAHO contract would expire on 31 December 1978, but would be extended for four more years. Export of animals both from the wild and from the colony in Iquitos were to be part of the new contract. Although all the primates were eating the "dry diet," some of the tamarins were showing signs of "Wasting Disease." Marmosets and tamarins frequently become depressed in captivity and lose their will to live. This condition, though not actually a clinical disease, is called "Marmoset Wasting Disease" by scientists. The report notes that the 22 squirrel monkeys born in the colony "are ready to be transferred for biomedical use."

The colony was facing still more problems:

A serious problem appeared in the cages of the monkey shelters, especially in the S. mystax with the presence of large numbers of cockroaches. To control this pest, Killmaster 1% (Dow Chemical) has been used.

One hopes that it was used carefully and not sprayed in the cages or in the food storage areas. In addition, another vermin problem was reported, "the presence of a few rodents in the monkey shelters."

An unspecified number of primates was exported during this period. The recently-purchased 9-ton boat, the "Indiana," had been damaged in an unspecified manner. A new motor costing \$5,000 would be required.

In addition, the Director of IVITA, acting at the request of NIH/PAHO, had requested permission to trap for export 80 Redbellied tamarins Saguinus labiatus and 30 Emperor tamarins Saguinus imperator in Madre de Dios Province, a remote area in Southeast Peru, far from Iquitos in the northeast of the country. The Emperor tamarin is a species as yet unexploited in biomedical research. It appears that the U.S. Government did not want to miss any opportunity to exploit Peruvian willingness to export primates, and was interested in developing new "animal models" of human diseases on new species.

Year 4, Third Report, March 1979. The report notes that the owl monkey "shelter" was in the process of being stocked. Over 100 Squirrel monkey births had occurred. However, the Whitemoustached tamarins had failed to breed. This was blamed on "nutritional problems or some behavior related problem." 85 primates had been exported during the period, including 50 Pygmy marmosets.

Year 4, Annual Report, June 1979. Mr. William Kingston left the project in March 1979 and returned to the United Kingdom. Dr. Carlos Malaga was being recruited to replace him.

The 165 White-moustached tamarins had finally produced 4 babies from 2 mothers, of which only 2 survived. The colony now held 53 Owl monkeys. However, they had been difficult to trap. Three methods were attempted: 1) clearing the area round a nesting tree and trying to net the monkeys when they left the tree, 2) covering the nest and chopping down the tree, and 3) "with a blow-gun using darts with curare that paralyse the animals (usual-

ly the mortality is high)." The use of curare, a paralytic poison, is extremely inhumane. Although the report admits to "high mortality," no details are given of the numbers of monkeys successfully caught by this technique and the number killed. It is not clear whether Dr. Blood, the Project Officer, was consulted about this plan to dart owl monkeys with curare. As a veterinarian, Dr. Blood should have known the likely consequences for the monkeys. The technique of chopping down trees and catching the animals as they fled did not work well - the monkeys usually fled amidst the commotion caused by the tree-chopping. In spite of the difficulties catching owl monkeys, NIH is planning to set up a huge colony of this species in Colombia, and another in Brazil.

The colony had obtained 55 Pygmy marmosets, which were "being maintained in small cages." Plans were under way to build a "shelter" to house 60 pairs of the species "if there is demand in the Scientific Community for this species." Plans were also under way to build "shelters" for Red-bellied tamarins and Brown capuchins Cebus apella, (also known as Weeper capuchins).

The report writer frankly admits that, in spite of the contract requirement for thorough and detailed record-keeping and reporting:

Until the beginning of 1979, it was difficult to maintain detailed records in the station on capture, captive management, breeding performance and morbidity and mortality, due to physical facilities which did not exist.

It appears that the NIH Project Officer, Dr. Benjamin Blood of the Primate Steering Committee, did not insist on proper standards of reporting, probably because, with primates flowing into Miami, he did not wish to "rock the boat." It is also possible that Dr. Blood considered this data potentially embarrassing and was happy to see it permanently lost.

Meanwhile, Colombians were still bickering about the location of the primate station.

No further progress reports were provided to IPPL, however, plans for continued operations (1978-82) were contained in the application submitted by PAHO for continuation of the contract. The Station in Peru would be expanded, with 2 new shelters being added. Export of wild-caught and captive-born primates would continue. "Field work" would continue - this was defined as "trapping for export and to stock the monkey shelters," "censusing of monkeys and . . . trapping . . . in these areas," and "management of populations" of selected islands.

Colombia would be expected to establish a breeding station, with 2 monkey shelters to be built in Year 1, one to house 50 pairs of Owl monkeys, and one for 50 pairs of Cottontop marmosets Saguinus oedipus. However, the Cottontop marmoset now appears to have been dropped from the project because of its endangered status. Three more "shelters" would be added later in the contract. "Field studies" would be performed in Colombia consisting of "censusing of owl monkeys to determine the best places for trapping" and "studies regarding the best method of live-trapping of owl monkeys" and the same activities for Cottontop marmosets. In addition, monkeys would be exported to the United States.

Brazil would set up a Station to hold White-moustached tamarins, Owl monkeys, and "other selected species." Field studies would consist of "trapping" and, in addition, "specific areas in the jungle of Brazil will be selected where monkeys will be maintained [sic] free, trapping them periodically in appropriate numbers." Monkeys would also be exported.

IPPL is concerned at what appears to be deliberate underfunding of the project by NIH. Approximately \$80,000 (U.S.) were allocated annually for 3 years. Several "shelters" to house several hundred primates, a quarantine building, offices and laboratories were to be built. Services were to be provided, animals caught, fed and cared for. The \$80,000 annually provided to PAHO by NIH stands in stark contrast to the budgets of the 7 established U.S. Primate Centers. For 1977, the budgets of these institutions ranged from a low of \$1,232,193 (Yerkes) to a high of

\$2,418,671 (Oregon). It is likely that NIH deliberately underfunded the project in order to force Peru to export primates to make up the difference. The Government of Peru apparently did not seek funding for any genuine conservation activities. By allowing export of wild-caught primates, it destroyed any incentive NIH might have had to make a success of the "breeding colonies." The Peruvians, being in possession of the monkeys NIH coveted, were actually in a strong bargaining position, but apparently accepted whatever NIH/PAHO suggested.

Although the project activities as conducted at the present level do not appear to threaten the survival of the species currently involved, the International Primate Protection League is deeply concerned about the well-being of individual primates. We do not consider the life of a primate to be wasted if nobody makes a dollar off it or performs experimental surgery on it. IPPL therefore sent letters expressing our concern about the well-being of the primates in the Iquitos colony to the Director of PAHO, the Director-General of the World Health Organization (PAHO's parent organization), and to Dr. B. Blood of the National Institutes of Health, the Project Officer. Dr. Pedro Acha of PAHO refused to comment or provide further information, suggesting that IPPL ask NIH for details, a surprising suggestion since PAHO was, according to the contract, supposedly functioning as an "independent contractor." Replying for the Director-General of WHO, Dr. Frank Perkins, Chief of Biologicals, stated merely, "thank you for your letter, the contents of which have been noted." In a letter to IPPL dated 26 October 1979, Dr. B. Blood, now retired from NIH, stated;

You ask about a "disastrous mortality of squirrel monkeys at Iquitos with over 200 dying." I have no information on this.

On 2 November, Dr. Blood clarified the matter - somewhat: he stated that the deaths took place during 1977 and 1978, and that:

I do not have a detailed listing of the causes, but I remember discussing the matter with Peruvian officials at the time. The deaths were due to a variety of causes, and I recall that the major factor was exceptionally heavy burdens of internal parasites.

IPPL contends that, as Project Officer, Dr. Blood had a duty to follow the colony progress more closely, since Peru had no experience in breeding primates. In any case, "parasites" is a catch-

all phrase frequently used to explain deaths of captive primates. All primates have a host of parasites with which they co-exist in the wild, but which tend to become aggravated in the depression following removal to captivity.

However, IPPL's most basic criticism is that the "conservation" element of the project appears non-existent. The activities of the project so far have been limited to exporting primates, catching primates for local incarceration, and performing "censuses" to determine new areas to raid. No mention is made of funds being spent on acquisition and protection of primate habitat, providing rangers for reserves and parks, conservation education for children and adults, developing alternate sources of protein for Peruvian tribes that eat primates and equipping anti-poaching patrols, all of which constitute genuine conservation activities.

In a position paper prepared in 1978, Dr. Russell Mittermeier, Chairman of the International Union for the Conservation of Nature's Primate Specialist Group, drew attention to misuse of the word "conservation" as applied to primates:

I do not think that captive breeding programs or cropping programs intended to supply primates for biomedical research should be construed as conservation. Such activities may provide information of interest to conservation, or they may provide economic benefit to source countries, or, in the case of captive breeding programs, may reduce pressure on wild populations. However, they are more properly considered under "utilization" or "use." If we include utilization under conservation, it won't be too long before everything involving primates is called "conservation." I exaggerate, of course, but I want the term conservation to retain some significance.

IPPL has submitted a further request for documents to the National Institutes of Health, which may produce more information than the sketchy reports provided to IPPL so far. PAHO's reporting is totally inadequate, and should be improved. U.S. taxpayers financing this project deserve a better explanation of where their money is going.

In addition, primate colonies are to be established in both Colombia and Brazil. Lessons can be learned from the failures in Peru. Unless these lessons are learned, history will repeat itself and another "conservation" project will be exploitation in disguise.

HIGH SCHOOL STUDENTS CUT UP RHESUS MONKEY

The **Delaware County Daily Times** (8 November 1979) reported that high school students in Springfield, Pennsylvania, were planning to dissect a Rhesus monkey cadaver obtained from the Parco Scientific Company, Vienna, Ohio. The monkey was "certified safe and free from bacteria."

One of the students told the newspaper, "This is terrific" as he donned his surgical gloves to cut up the animal.

IPPL considers that permitting schoolchildren to dissect monkeys is inappropriate and offensive. Because of the similarity of primates to humans, such dissection could foster inappropriate attitudes to both monkey and human life in young people at a sensitive age.

Educationally, allowing children to dissect monkeys makes no sense, since they do not yet understand fully lower forms of life. If the aim of the dissection is to lead young people into scientific careers, that might backfire. Sensitive young people could be "turned off" - and some of the people attracted might not be the type of person one wants to see embarking on scientific careers.

IPPL has stated its objections to this project to the Principal of Springfield High School.

CHIMPANZEES RETURN TO AFRICA

The IPPL Newsletter (August 1979) reported that eight chimpanzees were seized on 14 April 1979 in Bordeaux, France. The animals had been smuggled from the Ivory Coast, which has banned all hunting and export of wildlife since 1973. Their destination was the Cirque Moréno, a French traveling circus. The confiscated chimpanzees were transferred to the Tregomeur Zoo,

Côtes-du-Nord, France.

Seven of the chimpanzees (one had died) were shipped to Abidjan, Ivory Coast, on 23 October 1979. They are presently housed at Abidjan's new zoo, where they will be kept for a period of observation and preparation prior to release in the Asagny Nature Reserve, 100 kilometers from Abidjan.

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