LABORATORY PRIMATE NEWSLETTER

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The primary purpose of the Newsletter is an exchange of practical information about subhuman primates. However, short descriptions of current psychological, psychophysiological or physiological research or of "minor" research in these areas that will not be published will also be accepted. Examples of the kind of information that would be useful are as follows: new drugs, novel aspects of cage design, new products that might be of interest, evaluations of various products, references to or short summaries of articles, off-beat or other, of general interest, experiences in connection with the procurement of monkeys. The Newsletter will also publish offers to exchange monkeys (for example, older monkeys for young or infant monkeys) and requests for monkeys with special characteristics (for example, good breeders or pregnant females). If someone has a special problem, he might want to request help through the Newsletter.

Information for the Newsletter will be welcome from anyone in any research area who is using monkeys. The Newsletter will probably appear bimonthly and will continue so long as people are interested enough to contribute items of information. The mailing list is open to anyone expressing an interest. There is no subscription charge.

All correspondence concerning the Newsletter should be addressed to:

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AMERICAN IMPORTERS OF RHESUS MONKEYS

Animal Import Co. 1000 Poydras Street New Orleans, Louisiana

Asiatic Animal Imports, Inc. P. O. Box 8125 San Francisco 28, California

Bailey Industrial Supply Co. P. O. Box 74335, Oakwood Station Los Angeles 4, California

William H. Berman, Exporter San Francisco, California

Chase Wild Animal Farm Halifax, Massachusetts

Cox, Aspden & Fletcher 39 Cortlandt Street New York 7, New York

Ferndale Pet Supply 22636 Woodward Avenue Ferndale, Michigan

Hartelust-Thorsen Animal Suppliers, Inc. Delmar, New Jersey

Health Research, Inc. 666 Elm Street Buffalo 2, New York Primate Imports Corp. 489 Fifth Avenue New York, New York

Elizabeth Prinz 1415 N. Jackson Street Waukegan, Illinois

Research Animals, Inc. Box 57 Miami, Florida

V. D. Rider, Jr. Animal Acct. P. O. Box 158 New Market, Virginia

Sabanna Farms 401 Newman Avenue New Orleans, Louisiana

Shamrock Farms, Inc. R. D. #2 Middletown, New York

Trefflich Bird & Animal Co. 223 Fulton Street New York, New York

Lew Warren P. O. Box 45 Pana, Illinois

F. J. Zeehandelaar, Inc. 286 Clove Road New Rochelle, New York

Compiled by Miss Katherine A. Parent, National Institutes of Health

EASTERN SUPPLIERS OF MONKEY CAGES

Acme Metal Products 7757 South Chicago Ave. Chicago 19, Illinois

Fenco Cage Products 213 Camden Street Boston 18, Mass. Norwich Wire Works, Inc. Norwich, New York

Geo. H. Wahmann Mfg. Co. 1123 E. Baltimore St. Baltimore 2, Maryland

LABORATORY NOTES

Treatment of Intestinal Parasites

We have found dithiazanine iodide (Dizan, Corn States Laboratories; Delvex, Lilly) very useful in the treatment of rhesus and squirrel monkeys infected with a variety of intestinal parasites, including hookworms and whipworms. For 5-7 lb. rhesus monkeys, the dosage we have used is 1/2 teaspoon (approximately 33 mg.) of the powder per day. The monkeys readily accepted a mixture of the Dizan and Irradola-A on a slice of bread. There is a fairly wide safety margin in the dosage of this drug, which is not the case with older antihelminthics. Typically, we treat an infected animal daily for about a week, skip a week, and then repeat the treatment for a week. For insurance, we repeat the treatment again for a week about one month after the termination of the initial treatment. There has been no sign of a recurrence of these parasites in a group of 14 rhesus monkeys originally treated over two years ago. We had a recurrence of hookworms in one of our squirrel monkeys after treatment with Dizan, but this followed contact with a laboratory assistant's pet squirrel monkey.

We have not found Dizan completely successful in the elimination of pinworms and Strongyloides, although we have not carried out a systematic test. A new drug, pyrvinium pamoate (Povan, Parke Davis) specifically for the treatment of pinworm infections in humans has been put on the market. The monkeys have tolerated the product well when we used the dosage level recommended for humans, but we have not as yet been able to determine its efficacy.

The following is an excerpt from a letter received from Corn States Laboratories, with reference to Dizan: "We have treated monkeys in our local zoo, infected with roundworms, hookworms and whipworms and, according to our ova counts, they have recovered after being dosed at levels of 10 mg./kg. of body weight daily for five to ten days. We have also received reports from several places in the country wherein the tablets were used at the same level. No adverse effects were noted in these animals."

Morris L. Povar, D. V. M. Allan M. Schrier, Ph. D.

Treatment of Ringworm

We have found griseofulvin (Grifulvin, McNeil Laboratories; Fulvicin, Schering) very successful in the treatment of "ringworm" in rhesus monkeys. Apparently, this drug will cure the two most common types of ringworm--Microsporum and Trichophyton--but not some of the more exotic varieties. An infected animal will show signs of improvement within three to five days, but it is essential that the treatment be continued and that the animal be kept isolated until well after all the hair around the affected region has returned. The reason for this is that griseofulvin does not kill the existing ringworm, but only prevents its reproduction in the treated animal. The drug is extremely safe, and thus, we have been ad-

ministering a daily dose of 250 mg., which is a large one for rhesus monkeys under 12 lbs.

Morris L. Povar, D. V. M. Allan M. Schrier, Ph. D.

Alopecia in Rhesus Monkeys

Several rhesus monkeys in a group that arrived at the Brown Primate Psychology Laboratory about two years ago developed a bilaterally symmetrical alopecia about the face, neck and shoulders. Subsequently, the hair returned in the affected regions, but the alopecia has tended to recur repeatedly in one of the animals, a female. The skin in the affected regions is perfectly normal in all other respects, and no other obvious symptoms accompany the hair loss. Our guess is that the alopecia is the result of an hormonal dyscrasia. Any comments or suggestions would be appreciated.

Morris L. Povar, D. V. M. Allan M. Schrier, Ph. D.

RECENT ARTICLES AND BOOKS ON PRIMATE DISEASES AND CARE

Restraint by means of drugs

Restraint of Chimpanzees. Wallace, G. D., Fodor, A. R., and Barton, L. H. (Communicable Disease Center, Montgomery, Alabama, U. S. A.) J. Amer. Vet. Med. Assoc., 1960, 136, 222-224.

This paper describes the use of a tranquillizer, perphenazine (Trilafon, Schering Corp.), to facilitate handling of chimpanzees.

The Use of Trichloroethylene and Halothane Anesthesia in the Restraint of Laboratory Primates. Kinard, R., McPherson, C. W. (National Institutes of Health, Bethesda, Maryland, U. S. A.) Amer. J. Vet. Res., 1960, 21, 385-388.

The two drugs mentioned in the title were found to be safe and effective for temporary restraint of chimpanzees and monkeys.

Diseases and their treatment

Studies on a Pox Disease of Monkeys. Sauer, R. M. (School of Veterinary Medicine, Univer. of Pennsylvania, Philadelphia, Pa., U. S. A.) Amer. J. Vet. Res., 1960, 21, 377-384.

This article describes an outbreak of what appears to be a unique type of pox disease in a large colony of Old World monkeys.

Varicella in Apes. Heuschele, W. P. (San Diego Zoological Gardens, San Diego, California, U.S.A.) J. Amer. Vet. Med. Assoc., 1960 136, 256-257.

This article reports spontaneous infections with chicken pox in apes which were exhibited in close contact with humans. The author believes this to be the first reported instance of a spontaneous outbreak of this disease in any animal other than man.

Occurrence of the Nematode, Anatrichosoma Cutaneum, in the Nasal Mucosae of Macaca Mulatta Monkeys. Allen, A. M. (Comparative Pathology Section, National Institutes of Health, Bethesda, Maryland, U.S.A.) Amer. J. Vet. Res., 1960, 21, 389-392.

Septicemia in Vervet Monkeys Caused by Streptococcum Pyogenes. Gourlay, R. N. (Animal Health Research Center, Entebbe, Uganda) J. comp. Path., 1960, 70, 339-345.

Rickets in Monkeys. Maschgan, E., <u>All Pets</u>, 1960, <u>31</u>, 38-39. "Cage paralysis", the author claims, is actually rickets.

Anemia in the Chimpanzee. Ridgeway, T. R. (School of Veterinary Medicine, Univer. of Georgia, Athens, Ga., U.S.A.) Southeastern Vet., 1959, 10, 126-129.

This article reports the symptoms and treatment of anemia in a chimpanzee.

A Case of Hydatid Disease in the Rhesus Monkey. Summers, W. A. (School of Veterinary Medicine, Indiana Univer., Indianapolis, Ind., U.S.A.) Allied Vet., 1960, 31, 141-143.

General articles and books on diseases and care of monkeys

Care and Diseases of the Research Monkey. Sauer, R. M. (Conference Chairman and Consulting Editor) Ann. N. Y. Acad. Sci., 1960, 85, (Art. 3), 735-992.

A series of 25 papers resulting from a conference held by the New York Academy of Sciences, November 19 and 20, 1959.

Diseases of Laboratory Primates. Ruch, T. C., Philadelphia: Saunders, 1959.

Diseases of Primates. Scheidy, S. F., and Mulrooney, M. R. (School of Veterinary Medicine, Univer. of Pennsylvania, Philadelphia, Pa., U.S.A.) <u>Vet. Med.</u>, 1961, <u>56</u>, 17-22.

Things Worth Knowing About Monkeys. Frick, E. J. (School of Veterinary Medicine, Kansas State Univer., Manhattan, Kan., U.S.A.) Vet. Med., 1960, 55, 58.

Some Notes on the Monkey. Graham-Jones, O. (Zoological Society, London, England) <u>J. Small</u> Anim. <u>Prac.</u>, 1960, <u>1</u>, 32-46.

Observations on the Pathology of Monkeys. T-W-Fiennes, R. N., Brit. S.A.V.A. Cong. Proc., 1959, 108-112.

Clinical Approach to Monkeys. Graham-Jones, O. (Zoological Society, London, England) <u>Brit</u>. <u>S.A.V.A</u>. <u>Cong</u>. <u>Proc</u>., 1959, 116-124.

Miscellaneous

Fluid and Electrolyte Therapy for Monkeys. Pickering, D. E., and Kao, T. H. (Oregon Primate Research Center, P. O. Box 366, Beaverton, Oreg., U.S.A.) J. Amer. Vet. Med. Assoc., 1961, 138, 527-531.

This article describes studies in which rhesus monkeys were

maintained "for relatively long periods" on an oral solution. The authors feel that the solution should be useful in maintaining monkeys being transported long distances and in maintaining new monkeys during the laboratory conditioning period.

Physiology

Hematocrit Readings and Values of Plasma Electrolytes in the Rhesus Monkey. White, R. J., MacCarty, C. S., Grindlay, J. H., and Bollman, J. L. (Mayo Clinic, Rochester, Minnesota, U.S.A.) Proc. Mayo Clinic, 1960, 35, 114-117.

Body Temperature and Ovarian Function in Rhesus Monkeys. Erikson, L. B. Anat. Rec., 1960, 136, 189.

ARTICLES OF GENERAL INTEREST

A Population Survey of Rhesus Monkeys in Villages, Towns, and Temples of Northern India. Southwick, C. H., Beg, M. A., and Siddiqi, M. R. (Dept. of Zoology, Ohio Univer., Athens, Ohio, U.S.A., and Dept. of Zoology, Aligarh Muslim Univer., Aligarh, India) Ecology, 1961, 42, 538-547.

RESEARCH SUMMARY

The following is a summary of a paper presented August 30, 1961, at the Tenth Pacific Science Congress, Division of Public Health and Medical Sciences.

Preliminary Title: Studies of Primate Blood-Protozoa Probably Transmissible to Man *

Frederick L. Dunn and Frank L. Lambrecht G. W. Hooper Foundation, University of California Medical Center, San Francisco, California, USA

- 1. The results of a blood survey of 131 Peruvian and Colombian primates for trypanosome infections are presented: (see Table 1.)
 - a. 26 of 131 animals (20%) were found infected by polymorphic trypanosomes of the <u>T</u>. <u>lewisi</u>-type here referred to as <u>Trypanosoma</u> minasense Chagas, 1909.
 - b. 4 animals (3%) were found infected by <u>T. cruzi</u> Chagas, 1909. With more extensive use of xenodiagnosis and cultural procedures it is believed that higher <u>T. cruzi</u> infection rates would have been discovered in several primate species. Each of the animals infected by <u>T. cruzi</u> was also infected by <u>T. minasense</u>.
 - c. Although these infections were detected in San Francisco it is known that they must have been acquired in the home regions of the host animals. The animals were held in mosquito (and bug) proof cages from receipt at jungle collecting points until arrival in San Francisco. Whether or not they were actually infected in their forest habitat or on the ground soon after capture cannot be known with certainty. However, in past surveys, blood films taken immediately after capture or killing of South and Central American primates have frequently revealed similar T. lewisilike trypanosome infections, suggesting that the present infections were also naturally acquired in the arboreal habitat of the host.
 - d. New host records for <u>T. lewisi-like trypanosomes (<u>T. minasense</u>) resulting from this survey are: <u>Cebuella pygmaea</u>, <u>Tamarinus nigricollis</u>, <u>Saimiri boliviensis</u>, <u>Lagothrix infumata</u>, and <u>Oedipomidas oedipus</u>. New host records for <u>T. cruzi are</u>: <u>Saimiri boliviensis and Tamarinus nigricollis</u>.</u>
 - * PRELIMINARY: NOT TO BE QUOTED WITHOUT AUTHOR'S PERMISSION

 This investigation was supported in part by U. S. Public Health

 Service Grant 2E 179 from the National Institute of Allergy

 and Infectious Diseases.

e. There are approximately 78 lower primate species in 20 genera in the Western Hemisphere. 22 species in 13 genera have now been recorded as natural hosts of \underline{T} . \underline{cruzi} and/or \underline{T} . lewisi-like trypanosomes.

Table 1.

SOUTH AMERICAN PRIMATE TRYPANOSOMES: 1961 SAN FRANCISCO SURVEY

| HOST SPECIES G | EOGRAPHIC | NUMBER | NUMBER WITH "LEWISI- |
|---|---------------|----------|-----------------------|
| | ORIGIN | EXAMINED | LIKE" TRYPANOSOMES |
| Addition of the second of the | | | |
| AOTES TRIVIRGATUS | Eastern Peru | 3 | - |
| ATELES PANISCUS | E. Peru | 17 | 2 |
| CALLICEBUS CUPREUS | E. Peru | 1 | - |
| CEBUEALLA PYGMAEA | E. Peru | 9 | 2 |
| CEBUS SP. | E. Peru | 1. | |
| LAGOTHRIX INFUMATA | E. Peru | 7 | 1 |
| LAGOTHRIX SP. | Northern Colo | mbia 2 | - |
| OEDIPOMIDAS OEDIPUS | N. Colombia | 5 | 1 |
| SAIMIRI BOLIVIENSIS | E. Peru | 18 | 3 (+ 1 WITH T. CRUZI) |
| SAIMIRI SCIUREA | N. Colombia | 24 | 5 |
| SAIMIRI SCIUREA | E. Peru | 29 | 6 |
| TAMARINUS NIGRICOLLIS | E. Peru | 15 | 6 (+ 3 WITH T. CRUZI) |
| | | 131 | 26 |

- The nomenclature of T. lewisi-like trypanosomes of man and lower primates in South and Central America is discussed. Since 1909 at least 13 specific names have been assigned to trypanosomes of this morphological type from these hosts. Specific differences have been based on host occurance and minor morphological characters. The described species appear to be biologically as well as morphologically similar, insofar as they have been studied. The authors suggest that twelve of these species names probably should be considered synonyms of T. minasense Chagas, 1909 (at least until proven otherwise on firm morphological and/or biological grounds). These species are: T. mycetae Brumpt, 1913; T. devei Leger & Porry, 1918; T. escomeli Yorke, 1920; T. rangeli Tejera, 1920; T. florestali Romana, 1932; T. manguinhense Arantes & da Fonseca, 1932; T. advieri Floch, 1941; T. saimiri Rodhain, 1941; T. guatamalense DeLeon, 1946; T. cebus Floch & Abonnenc, 1949; and T. ariarii, Groot, Renjifo, & Uribe, 1951. T. diasi Deane & Martins, 1952, while morphologically T. lewisi-like, reportedly differs in its developmental cycle in reduviids from some of the other forms which have been studied in these bugs. The T. lewisilike parasites discovered in the present survey are referred to as T. minasense Chagas, 1909.
- 3. The strain of T. cruzi isolated from Tamarinus nigricollis, and a

- T. minasense strain from Saimiri sciurea were readily cultured in modified Wenyon's semi-solid blood sugar.
 - a. Studies of the <u>T</u>. <u>cruzi</u> strain revealed it to be highly virulent and usually fatal for white laboratory mice. Of 34 1-2 day old sucklings inoculated subcutaneously in the nape of the neck with 0.1 ml. of culture containing large numbers of metacyclic forms, all died (average day of death = 13) and 71% were proven positive by study of tail blood films, impression smears and stained sections. Of 8 immature mice receiving the same dose 4 died, and 4 were later sacrificed; 5 of the 8 were proven positive. Heart muscle damage was evident in most of the animals in which parasites were not detected. Strains of <u>T</u>. <u>cruzi</u> indigenous to the southwestern United States and northwestern Mexico are usually much less virulent in this laboratory host. (Wood, 1934; Kofoid & Whitaker, 1936)
 - b. One instance of fatal <u>T</u>. <u>cruzi</u> infection of an adult female mouse after ingestion of parts of one of her heavily infected, freshly dead young was noted.
 - c. The <u>T. minasense</u> strain from <u>Saimiri</u> proved to be non-pathogenic in suckling mice. Although a few bloodstream infections were detected, no evidence of tissue invasion or damage was found in histologic studies of 27 mice in-oculated with this strain. These results are similar to those of Herbig-Sandreuter (1955, 1957), who studied a strain of "<u>T. rangeli</u>".
- 4. The <u>Tamarinus</u> strain of <u>T. cruzi</u> develops readily, in normal fashion, in <u>Triatoma protracta</u>, a common reduviid bug of western North America. Studies of <u>T. minasense</u> in reduviids are in progress.
- 5. It is suggested that South and Central American lower primates may serve as an important primary forest reservoir for <u>T</u>. <u>Lewisilike</u> trypanosomes (<u>T</u>. <u>minasense</u>), of which at least some strains or closely related species are transmissable to man in nature. There is some evidence that these trypansomes can also establish themselves in a domestic cycle (man-reduviid-man), possibly involving other vertebrate hosts, independent of any forest cycle.
- 6. T. cruzi also occurs in an arboreal cycle involving primates, unknown vectors (? reduviids), and probably other forest-dwelling vertebrates. This cycle, helping to maintain the parasite in nature, does not seem to be of immediate importance to man in most regions of South and Central America because the infection is also widespread in ground-dwelling vertebrates and invertebrates, some of which live in close domestic or semi-domestic contact with man. In eastern Peru, however, where ground-dwelling vertebrate hosts of T. cruzi have not as yet been detected

(Herrer, 1960), the forest primate cycle may be of greater importance to man, spill-over from this cycle perhaps accounting for the occasional human cases of Chagas' disease seen in the area.

7. The numerous records of <u>T. cruzi</u> and <u>T. lewisi</u>-like trypanosomes in arboreal monkeys and marmosets raises some interesting biological questions. What vectors are involved? What other arboreal vertebrates (bats, rodents, etc.), if any, are involved in the cycles? Are the primates infected by the bite of an arboreal vector insect (or by bite plus fecal contamination of the wound); are they infected by ingestion of infected insects; or, as the data in Table 2 suggest, are both of these infection routes operative? Since vegetarian as well as insectivorous animals are infected it seems likely that transmission by biting vectors must take place. At the same time infection by ingestion of infected insects is suggested by the higher infection rate in insectivorous animals. These data are, however, of only borderline statistical significance.

Table 2.

"LEWISI-LIKE" TRYPANOSOMES OF SOUTH AMERICAN PRIMATES:

INFECTION RATES AND DIET

| DIET | HOST GENERA | NUMBER EXAMINED | NUMBER INFECTED | PER CENT INFECTED |
|----------------------------|--------------------------------------|--------------------|--------------------|----------------------|
| PRIMARILY VEGETARIAN | ATELES LAGOTHRIX | 26 | 3 | 12 |
| OMNIVOROUS (MIXED) | SAIMIRI | 71 | 14 | 20 |
| PRIMARILY INSECTIVOROUS | CEBUELLA OEDIPOMIDAS TAMARINUS | 29 | 9 | 31 |

8. Some practical public health questions have been raised by the above findings. What significance is there in the importation of primates into the United States infected with a strain of T. cruzi considerably more virulent for at least one species of laboratory animal than the T. cruzi strains indigenous in the Southwest and southern California? Is there a potential public health problem when these animals are sold as pets in regions such as southern California where reduviids are locally abundant? Might this more virulent strain establish itself in nature in the United States? Finally, do primates of the Western Hemisphere, infected with T. cruzi, constitute a hazard for colonies

of macaques and other Asian and African primates when they are introduced into the same animal quarters? Transmission by bedbugs, which sometimes infest animal houses, is at least theoretically possible (either by bite or ingestion of the infected bug). To cruzi will develop in these insects, and an outbreak of \underline{T} . Cruzi infection in rhesus monkeys has been reported from a laboratory where bedbugs were present as pests. (Fulton and Karrison, 1946)

NEWSPAPER CLIPPINGS

MONKEY MENACE (A letter)

Sir, - The monkey menace has assumed alarming proportions in Delhi and for this the Hindu sentiment alone is to be blamed for the sanctity it attached to this animal.

I wonder if a pious Hindu should object to their destruction--animals which attack children and women and raid shops and kitchens. No free country would allow this to happen.

It is time the people took to air-guns and started shooting them. What is more, the orthodox section should not oppose their destruction. Yours, etc., UGRASEN KASHYAP

Evening News (H.T.), New Delhi, 26 October 1960

NEW APPROACH TO MONKEY BUSINESS

Their campaign virtually ineffective against the monkey nuisance in New Delhi, the Municipality has now thought of another plan - an air-gun.

Exasperated officials, who have employed expert monkey catchers to drive the animals away has so far failed. They have been told that the only way to get rid of them is to shoot them for in the expert's considered view, the animals are far too urbanized and worldly wise.

Faced with fierce opposition from the religious-minded against the shooting of the monkeys, the Muncipality now feels that an air-gun will scare them away. A catapult might help supplement the air-gun, a member of the Municipality has suggested.

Statesman, Delhi, 27 October 1960

MONKEY TALK

The New Delhi Municipal Committee, unable to catch the monkeys in its territory by conventional methods is now proposing to use an air gun which it feels would help scare them away. The air gun squad will also be equipped with catapults and monkeys can expect a harrowing time ahead. Or perhaps credited as they have been by the committee with a high IQ, they may, after a time, learn to deal with the air gun and catapults. But if the committee's men do give some evidence of marksmanship we may have on hand a long list of wounded and ailing monkeys for whose care the committee may be asked to set up another squad.

Evening News (N.T.), New Delhi, 27 October 1960

THE SIMIAN HAS THE LAST LAUGH

N.D.M.C.'s Failure Against Monkeys. The discussion over steps to check the monkey nuisance in New Delhi provided some humour to an otherwise business-like meeting of the New Delhi Municipal Committee on Friday. Having failed to find a solution to the problem, the Committee passed the matter on to Delhi Corporation by deciding to ask it to do the job in return for payment.

The Committee has proposed to buy air-guns to scare away monkeys from places like the Diplomatic Enclave and South Block which houses part of the Central Secretariat. This proposal was rejected.

When the item came up for discussion, the Committee's President, Mr. A. R. Malhotra, remarked: "Do you think it (an air-gun) will be effective?"

Mr. A. P. Mehta, Assistant Secretary, suggested that the Committee train its own men in the art of catching monkeys. "Let us open a monkey department," quipped Mr. Mohan Singh, the Senior Vice-President (Laughter).

One member said the Committee should not undertake the wholesale extermination of monkeys but should kill one and hang it up in a monkey-infested locality. This would have the effect of scaring the other monkeys away, he believed. The Health Officer, however, rejected the suggestion on the plea that the rotting carcass would be harmful to the public health.

Mr. Malhotra said monkey-catchers had not been able to check the nuisance despite the fact that the Committee had raised the remuneration for one monkey caught from Rs. 7 to Rs. 10 and later to Rs. 15.

Statesman, Delhi, 29 October 1960

MONKEYS PUT NDMC TO THE WORSE

The growing monkey nuisance in various localities of New Delhi is proving a bigger problem than the Municipal Committee can handle.

Recently complaints about the monkey trouble in South Avenue and North Avenue, 'H'Block of the Central Secretariat and in bungalows in the neighbourhood became the subject of a question in Parliament.

Officers of the Defence Ministry allege that monkeys enter their offices, tear up papers and sometimes hold files to ransom in return for a piece of fruit or sweet.

A spokesman of the NDMC said on Friday that even the most experienced monkey catchers had failed to do the job successfully. An expert monkey catcher called from Lucknow has had to return disappointed. During a week his party of seven was able to catch only one monkey.

The NDMC, the spokesman said, had tried several other methods to catch monkeys but all in vain. In order to give an incentive to the catchers the fee per catch was increased to Rs. 15 but the result continues to be disappointing.

Hindustan Times, Delhi, 19 November 1960

CURRENT COMMENTS

Monkeys, Et al. The New Delhi Municipality is reported to be contemplating the use of an air-gun to fight the monkey menace in the Capital. There seems to have been a race in urbanisation and homo sapiens has conceded a point to the primates, for the monkeycatchers have found the animals "too urbanized and worldly wise." Which makes one wonder as to who is learning from whom? It used to be said at one time that the surest way to feel young is to undergo a course of monkey-gland therapy. But how they have scored over men with their pranks and exuberance! And the day when the airgun is commissioned will be one of great excitement for Delhi citizens. From Connaught Circus to Chanakyapuri, the somnolent secretariat babus, the wage-board conscious chowkidars and the satyajits with sardonic smiles will watch the shooting spree at lunch hour. Soon after there is bound to be the ceremonial procession of defenders of the monkey faith, performing the last rites to the sacred dead. All this is the funnier side of this monkey business but neither an air-gun, nor even an ICBM will solve this problem. Monkeys are a problem, whether in Delhi or Dandakharanya, and if they have become urbanised, it is because man has ruthlessly destroyed their natural habitat - the forests. Delhi fears the advances of the Rajasthan desert and with it has come the acclimatisation of the monkey to Delhi living conditions. Whether it be the abandoned bull or the mischievous monkey in this land of leaders, one can always expect some to espouse their protection. For to oppose monkey catching is to them, a means for vote snatching, what with the gullible outnumbering the discriminating under adult franchise. Just as well that some painstaking researcher in the West found that monkeys should make admirable telephone operators. But then they are short of men. To quote Kipling, a great lover of the langur, "East is East and West is West. Never the twain shall meet". Let us deal with the monkeys in the traditional Delhi way -- worship them, drive them to despair and shoot them with an air-gun.

Deccan Herald, Bangalore, 30 November 1960

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