

Proposed Research Project for Monitoring Released Mugga Crocodile using Radio telemetry equipment -

Research Project - ~~Mugga~~ Monitoring of Released mugga

Aims & Objectives - To study the ^{survival} home range, territory, wild growth, movements, habitat preference and daily activity pattern of mugga crocodile (*L. ferox*) released by using ~~reintroduction of captive~~ ~~reared~~ radio telemetry equipments.

Principal Investigator - B. L. Chaudhary, ^{the} Research Assistant, A.P. Crocodile Conservation project

Co-investigators - K. V. Prasad, Range Officer, Crocodile scheme, and other ^{staff} ~~staff~~ ^{sanctioned} ~~staff~~ ^{by} ~~by~~ ^{GOI/FAO} ~~GOI/FAO~~ crocodile project

Proposed place of work - 1. Rangire wildlife sanctuary, ~~in~~ ⁱⁿ ~~the~~ ^{the} ~~district~~ ^{district} ~~of~~ ^{of} ~~Hyderabad~~ ^{Hyderabad} ~~30 km~~ ^{65 km west of Hyderabad} ~~west of Hyderabad~~ ^{30 km} ~~west of Hyderabad~~ ^{west of Hyderabad}

Alternate site - ^{By releasing} ~~By releasing~~ ^{stock of 1m to 1.5m size} ~~stock of 1m to 1.5m size~~ ^{captured} ~~captured~~ ^{mugga crocodile of local strain fitted with} ~~mugga crocodile of local strain fitted with~~

Methodology - radio transmitter devices and monitoring - ^{by motorboat} ~~by motorboat~~ ^{the released crocodile using a receiver} ~~the released crocodile using a receiver units. The entire length of river Rangire within the sanctuary (32 km) is divided in to grids of 1 km by fixing fluorescent mark board on either bank. This will help in plotting the exact location of monitored crocodile at any time/place. & records the information in prepared form for analysis.~~

2

Proposed period of project - (1 June 1983 to 31 Dec 1984)
~~winter 1982 (oct - mar) to~~
~~winter 1984 (oct - mar) .~~ 2 yrs

Frequency of fieldwork → week long field trips at an interval of one month by the principal investigator and regular weekly ^{regular} ~~monthly~~ trips by ^{traps} ~~of~~ ^{of} ~~Sunday~~ field staff.

Equipment - required : 1. Radio transmitter Equipments and receiver

(Already obtain by the FAO/GEF Crocodile project at Hyderabad to be used by participants state crocodile projects)

They be obtain from FAO/GEF crocodile project.

- 2. In. Spotting scope (with FAO/GEF Crocodile project - 2 pair Binocular (8x40) with telescope)
- 3. Boat - with outboard motor and manual rowing (Available with the AP state crocodile project, and in use in the proposed Sanctuary.)
- 4. Jeep (Diesel) - Already available with the state crocodile project -
- 5. Heavy duty spot light & battery 12V 24A

6. Head lights 2 nos. (From FAO/GEF equipment collection).

Justification: Five wildlife sanctuaries in Andhra Pradesh are involved in myxoma control management. In two sanctuaries i.e. Mangrove (Medak dist) and Lakshmana Keshavnagar & Member of OT (wild ^{exists} population are managed as in Rajangmawaya-trisailam Palahat and Kinnerasani further ^{capture, rear} stock ^{not} have been reintroduced to build up natural population. The state project was the first in this to carry out this operation in Feb 1977. One of the pre-requisites in these release programmes have always been the selection of ^{a suitable} natural habitat and this state is the only one where all myxoma have been released back into the wild in protected wildlife sanctuaries (see map).

The first ^{was carried out} field release, in ET Palahat in Feb 1977 with ^{two at least} ^{year} of ^{or} ^{more} captive reared myxoma for Nehru Zoological Park. ^{Carried out} ^{under} ~~results~~ A well planned monitoring & exercise ^{involved} by research, ~~and~~ protection ~~and~~ field staff of the project have shown 100% survival of released stock ~~and~~ (results of 4 yr monitoring exercise being published in IBNHJ) and in 1981 the released stock have started breeding in the wild completing the exercise. In 1982 at least two females of the released ~~five~~ have ~~definitely~~ bred with ~~unconfined~~ ^{releases} ~~of~~ a third female breeding. By 1983 all females ^{releases} are expected to breed.

This success justifies an enlarged monitoring program in an measurable area, preferably ~~in~~ a natural myxoma habitat where no other captive stock have been released. The proposed two places are ideal in this

It is proposed that the principal Investigator and
the co-investigator be sent to Nepal (Naryeni river)
in Royal Chitwan National Park, Nepal to study and
acquaint themselves with the radio ~~transmitting~~ transmitting
work being carried out on Gharial (Gharial gharial)
by the National Park services by an Dr. Mel Sengquist of
Smithsonian Institution, U.S.A. and Mr. Hemant - Assistant the senior Zoologist, Nepal Wildlife
, research and services,
This should preferably be in Nov/Dec 1982 for
a period of ~~15 days~~ 2 to 3 weeks.

Nepal is chosen since it is almost like Indian
field condition and both Gharial gharial & C. felis
occur there. ~~conditions to~~ ~~the~~

Dr. Mel Sengquist / Smithsonian Institution,
Radio telemetry studies on Gharial - 50 Gharials fixed
with Radio Collars in the Royal Chitwan National
Park in Nepal. Nepali counterparts within the National
Parks Board will monitor these animals.

ANNEX CUPS

FUNDS REQUIRED

1. RUNNING & MAINTENANCE OF MOTOR VEHICLES & RESEARCH BOAT } Rs 20,000/-
 @ Rs 10,000 per annum

2. PURCHASE OF EQUIPMENT

- A SPOTTING SCOPE
- B CAMERA & TELELENS
- C BINOCULARS (2 nos)
- D LAB EQUIPMENT (5 mtr)
- E FIELD TENT & CAMPING EQUIPMENT

Rs 40,000
~~Rs 40,000~~
 Rs 5.00
 Rs 10.000
 Rs 3.000
 Rs 10.000
 Rs 12.000

3. OFFICE SUPPORT MATERIAL @ 5.00/-

(A) PRINTING OF PROFORMA MAP, REGISTER AND OTHER CONTINGENT REQUIREMENTS

Rs 10,000/-

4. Journals & Periodicals @ 10.00 / per

Rs 20,000

STAFF required

- ~~Boat - Surveyor - 2~~
- Field ~~Supervisor~~ ~~Personnel~~ } 2
- Research Station ~~Boat Surveyor~~ ~~Personnel (Forester level)~~ } 2
- Boat Surveyor - 2

- ① Field ~~Research Station~~ ~~Supervisor~~ ~~Personnel~~ at ~~Station A~~ Rs 25,000/-
- ② Field ~~Research Station~~ ~~Supervisor~~ ~~Personnel~~ at ~~Station B~~ Rs 25,000/-

Repetiles



Non - Recurring -

1. Purchase of Equipments -

Rs 50,000

2. Journals & Periodicals

Rs 20,000

3. field laboratories
(2 nos.)

Rs 50,000

Staff Required.

10 Field Support Personnel
at field herbariums
(Forester Level)
each at field station

2 nos

20 Bcaal - Sarangy 3.

2 nos.

Recurring Expenditure

Establishment -

Salary of staff -

T.A for staff - Rs 10,000
@ 5,000/ea

Running Maintenance of

of Motor Vehicle &

Research Boat -

Rs 20,000.00

Office Support -

Rs 10,000

Contingency of Performance

Purchase of Maps,
Registers, other contingent
requirements

① Recor. Cam,

② Holding posts with
water supply
4 nos at Kulebgor.

③ Field station at - Kulebgor.

④ ~~Stores~~ Laboratory ~~Stores~~

~~Research Field Station~~ cum Informator
Centre at Kulebgor

⑤ Grid marker boards with
fluorescent tapes &
boards & labels

⑥ 3 no Boat mooring ~~posts~~
channels with shed

⑦ Radio transmitters (10 nos) and
Receiver unit with directional
antennae.

⑧ ~~Scientific Journals & Periodicals &
Books.~~

⑨ ~~Laboratory Glassware & fixtures
& chemicals.~~

⑩ ~~Photographic dark room
Equipments~~

Hatchery &
Holding posts

~~Store cum
Laboratory~~

do.

not required

from inventory

1. Laboratory

Herbarium sheets

Plant-press

Blotting papers etc.

M. Lenses / Dissolving kits

Herbarium cellophane

Tapes etc.

Malabar
Evolution

Malabar
Evolution

Malabar
Evolution

Malabar
Evolution