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MAJOR STEPS TAKEN TOWARDS OTTER CONSERVATION IN INDONESIA

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Abstract: A cooperative project on otters of West Java undertaken by the Indonesian Directorate General of Forest Protection and Nature Conservation (PHPA) and Asian Wetland Bureau- Indonesia is nearing completion. Fieldwork was carried out and data collected in 15 representative wetland areas between July 1993 and May 1994 to determine which otter species occur, and their distribution and habitat use in West Java. Final reports are in preparation and will be available by the end of this year (1994). The conclusions are presented, translated from Indonesian, which identify threats (wetland conversion to rice fields, settlements, aquaculture, pollution, prey reduction due to pollution and direct conflict as pests), summarise the role of otters (enrich Indonesian biodiversity, a matter of national pride, ecological health indicators, control of pests in rice fields, public entertainment) and suggest follow-up (immediate listing as protected, guarding of hybrids to prevent escape into the wild, improving public awareness, foundation of an Indonesian Friends of the Otter group, standardisation of otter names).

A cooperative project on otters of West Java undertaken by the Indonesian Directorate General of Forest Protection and Nature Conservation (PHPA) and Asian Wetland Bureau- Indonesia is nearing completion. Fieldwork was carried out and data collected in 15 representative wetland areas between July 1993 and May 1994 to determine which otter species occur, and their distribution and habitat use in West Java. Final reports are in preparation and will be available by the end of this year (1994).

Two otter species, the Asian Small-clawed Otter *Aonyx cinerea* and Smooth-coated Otter *Lutrogale perspicillata* occur on Java. *A. cinerea* occurs in a range of habitats from coastal and other lowland wetland types up to 2000 metres above sea-level, whereas *L. perspicillata* is restricted to coastal wetlands. Both species are threatened by wetland pollution, especially by the misuse of pesticides in agriculture and aquaculture, by conversion of natural habitats and, to a lesser extent, by hunting. The Smooth-coated Otter is especially endangered, with only a few small, isolated populations remaining. One main scientific question, the possible occurrence on Java of Hairy-nosed Otter *Lutra sumatrana* and Eurasian Otter *Lutra /M/*ra,both very rare in Southeast Asia, was answered: earlier records of *Lutra lutra and Lutra sumatrana* for Java were found to have been misidentifications, and during field work and museum collection analyses no evidence of either of these two species was found.

Both the otter species that do occur play a significant role in everyday farming life in West Java: *A. cinerea* has been found to be a predator of certain rice-field pests, but both species also have bad reputations for raiding fresh-water and brackish-water fishponds. Predation by otters may locally severely affect small-farming pond schemes, but during this survey traditional methods which prevent otters from pond-raiding without causing them harm were observed. During the West Javan Otter Project a total of 85 people from Indonesia, including forestry officers and rangers, three scientists and three students were trained in otter survey techniques.

Another major step towards raising awareness and attention for the species in Indonesia was the implementation of a first national symposium on otters. On 7 April 1994, about 150 participants gathered in Bogor, West Java, for the "First Symposium on Otters in Indonesia"; they included key government officials from nature conservation departments and agencies, mammalogists, fisheries and

agriculture experts, NGO representatives, university students and other interested parties. Ten contributions were presented and discussed by the participants, all of which were observed and well-documented by the Indonesian press, radio and TV. Topics ranged from the natural history of Indonesian otters to applied problems such as wetland pollution and conversion, fishpond raiding, otters as pest control, rearing otters in zoos, otters as bioindicators, nature conservation efforts, conservation legislation and otter hunting.

One of the most important outcome of the Symposium was the proposal that all four otter species be protected under Indonesian law, and this proposal was presented to the Indonesian Ministry of Forestry, the authority responsible for species conservation legislation. At the time of writing, the Minister of Forestry has just agreed to the legal protection of all otter species in Indonesia, The Proceedings of the First Symposium on Otters in Indonesia have been published in Indonesian with English abstracts and are available from AWB-Indonesia (PHPA & AWB-Indonesia 1994).

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APPENDIX:

The following conclusions have been translated from a legal document in the Indonesian language. In the event of disputed interpretations, the Indonesian version will always be the final version [translation by Roland Melisch, Asian Wetland Bureau-Indonesia]

CONCLUSIONS OF THE FIRST SYMPOSIUM ON OTTERS IN INDONESIA

The participants of the First Symposium on Otters in Indonesia, which took place on Thursday, 7 April 1994 at Jalan Juanda 15 in Bogor, West Java, agreed the following conclusions:

A. INTRODUCTION

- 1. Indonesia harbours the highest diversity of otter species in the world. The four otter species occurring in Indonesia are the Asian Small-clawed Otter *Aonyx cinerea*, Smooth-coated Otter *Lutrogale perspicillata*, Eurasian Otter *Lutra lutra* and Hairy-nosed otter *Lutra sumatrana*.
- 2. All four otter species occur on three of the larger islands in Indonesia: Java, Sumatra and Kalimantan [Indonesian Borneo], and on smaller adjacent islands.
- 3. All the aforementioned otter species are listed under CITES Appendix I or II, but are not yet listed as protected wildlife species under Indonesian law.
- 4. Because of the lack of information and research, the otter is not widely known in Indonesia. In rural areas otters are perceived to be a pest in fisheries.

B. THREATS TO OTTER SURVIVAL

Otters are threatened because:

- 1. The designation of wetlands for functions such as rice-fields, settlements and brackish-water pond schemes is leading to a decline ini suitable otter habitat;
- 2. Habitats are being degraded by pollution caused by the uncontrolled use of toxic and hazardous substances in the agriculture and fishery sectors;
- 3. Prey species are being poisoned by the chemicals mentioned above, thus leading to a declining in otter populations in the wild;
- 4. Otters are still generally perceived to be pest species and efforts are frequently made to exterminate them.

C. THE ROLE OF OTTERS IN THE ECOSYSTEM AND THEIR BENEFITS FOR THE PEOPLE

- 1. Otters are wetland wildlife species that enrich Indonesian biodiversity, which is a source of national pride.
- 2. As top predators in wetlands, otters are very important in safeguarding a balanced ecosystem. They can also act as indicators of wetland habitat conditions.
- 3. One of the acknowledged agricultural benefits of otters is their role in helping to control destructive crabs in rice-fields.
- 4. Otters are highly intelligent and may be trained for public entertainment.
- 5. Extinction of otters would not only reduce Indonesia's wildlife diversity which forms part of the national pride, but also disturb the equilibrium of wetland ecosystems.

D. FOLLOW-UP

1. Initial Attempts At Species Conservation

- a. Because of declining populations the otter should be listed immediately as a protected species.
- b. Hybrids between Asian Small-clawed Otters and Smooth-coated Otters in captivity at Gelanggang Samudera Ancol should be closely guarded and monitored to prevent the escape of hybrid offspring.

2. Improvement Of Public Awareness

- a. Information extension is urgently needed about the otter's role in wetlands, practical methods to limit otter attacks on fishponds and the use of appropriate pesticides. Information should be directed towards the community in general, with special emphasis on forestry and agricultural [including fishery] officers,
- b. The foundation of an "Indonesian Friends-of-the-Otter Group" should be encouraged. The group could include students, high-school students and other people with an interest in following-up efforts for otter conservation.

3. Proposed Standardization Of The Indonesian Names Of The Four Otter Species

A proposal should be made to LIPI [The Indonesian Institute of Sciences] for the standardization of the names of the four otter species, such as

for Aonyx cinerea	Berang-berang cakar kecil
for Lutrogale perspicillata	Berang-berang bulu lichi
for Lutra lutra	Berang-berang utara
for Lutra sumatrana	Berang-berang hidung berbulu

Signed on behalf of the participants by the Director of Nature Conservation, Dwiatmo Siswomartono Bogor, 7 April 1994