

AFC7 Roundtable Discussion

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“Animal Release Problems in Asia: Harm caused by introduction of animals into natural environments, with special reference to fish”

Organizer: Atsumi International Foundation Sekiguchi Global Research Association (SGRA)

August 10th (Saturday) 2024, 9:00–12:30

Language: English

Venue: Chulalongkorn University [Room 501-23&25]

Abstract/Overview

Nowadays, many varieties of animals are being released into natural environments by humans. However, release of animals, especially invasive and alien species, can seriously disturb, damage and alter the original ecosystems and genetic identities of their component species which are the result of long periods of past evolutionary selection.

This roundtable discussion aims to provide information on the present status of anthropogenic “animal release” (broadly defined here as all kinds of releasing of animals by humans directly or indirectly into natural environments) in Asia, with special reference to fish. It will focus on problems of so-called “prayer animal release (PAR),” a traditional “compassion-based” religious practice of releasing captive animals into the wild to gain merit, in East and Southeast Asia.

To highlight the uniqueness and characteristics of the problems of PAR in Asian countries, information on the present situation of animal release in the western countries (USA and Europe) is also provided for comparison.

9 : 00 **Overview by Chair****Dr. Prachya Musikasinthorn**

Department of Fishery Biology, Faculty of Fisheries, Kasetsart University

9 : 05 **Speech 1****Dr. Prachya Musikasinthorn**

Department of Fishery Biology, Faculty of Fisheries, Kasetsart University

“Ploi pla” or the fish-releasing ceremony in Thailand as a prayer animal release problem: biological and anthropological approaches”

Presently, prayer animal release (PAR), especially that of fish, is one of the most popular religious activities in Southeast Asia, including Thailand. The fish-releasing ceremony, called “ploi pla” in Thailand, is usually conducted in aquatic environments such as rivers, canals, and ponds attached to temples as a kind of “tham bun (merit-making)”. But because many fish species that have been recently used in “ploi pla” are nonindigenous, the ceremony has caused problems of alien species introductions. The present status and structure of “ploi pla” in Thailand have been studied by using biological and anthropological data obtained from the present speaker’s fieldwork and literature survey. Interestingly, it is revealed that the common method and style of “ploi pla”, which has been performed in the past several decades and is still popular in Thailand, is remarkably different from that of ancient customs. Its meanings and purposes are being interpreted and manipulated conveniently by people who profit from it, and it can be recognized as a part of so-called “Buddhism commerce (phuttha panit),” of which many examples can be observed in the country. An inventory, characteristics, and biological observations on fish species used in “ploi pla” are also provided.

9 : 40 **Speech 2****Dr. Katsuki Nakai**

Researcher at Lake Biwa Museum

“Conflicts between emotions and logic, cases of releasing fish and its regulation in Japan and other East Asian countries”

In Japan, we have the “Hōjōe” religious ritual, similar to the practice of releasing live animals into the moats around Buddhist temples in Thailand. These practices originally served to accumulate merits, atone for the original sin of taking other creatures’ lives for our survival, and manage populations of preyed animals. However, with modernization, the latter function has been lost, and the practices now often involve non-native species that harm biodiversity. The introduction of North American black bass for recreational fishing is a typical example, disrupting native aquatic ecosystems and fisheries nationwide. Along with other ornamental and aquaculture fish, releasing these species

into the wild has caused invasive species problems. These biodiversity disruptions, common in other countries, highlight the conflict between traditional practices and modern biodiversity conservation, leading to legal regulations in Japan and other East Asian countries.

10 : 15 **Speech 3**

Dr. Yoshinori Taniguchi

professor of Faculty of Human Studies, Meijo University

“Non-native fish introduction problems with reference to the historical inland fisheries management in the USA”

Fishes are important recreational resources worldwide. Historically, hatchery-reared fish stocking has been a primary way of solving the over-exploitation to meet the need of anglers. In the USA, fisheries in lakes and rivers are managed by state governments; however, fish stocking is no longer considered a sound management practice but rather habitat improvement and non-native fish management have become increasingly important. Non-native fish introduction by ordinary citizens is strictly prohibited by the state governments. If you break the law, a large sum of fine and imprisonment as well as the deprivation of fishing license for life will result. This talk will mainly introduce you how the non-native fish introduction is managed in the US and some comparisons will be made between Japan and European countries.

10 : 50 **Coffee Break**

11 : 05 **Discussion**

Moderator / Discussant: Dr. Jenjit Khudamrongsawat

Speaker 1.: Dr. Prachya Musikasinthorn

Speaker 2.: Dr. Katsuki Nakai

Speaker 3.: Dr. Yoshinori Taniguchi

12 : 05 **Q&A**

12 : 20 **Closing Remarks**

Dr. Prachya Musikasinthorn

Speakers



Coordinator / Speaker 1: Prachya Musikasinthorn

Prachya Musikasinthorn was born in New Delhi (India) and brought up in Yokohama (Japan) and Bangkok (Thailand). He started to be interested in freshwater fishes in flooded Bangkok in his childhood. He received BS, MS, and Ph.D. from Tokyo University of Fisheries (Presently, Tokyo University of Marine Science and Technology) in Aquatic Bioscience (Ichthyology). Presently, he is an assistant professor of Department of Fishery Biology, Faculty of Fisheries, Kasetsart University, Bangkok, Thailand, where he conducts research on taxonomy, systematics and biogeography of freshwater fishes of southern Asia. He is also interested in and investigates on relationship between humans and fishes including surveys on alien fish species in the region. He has conducted extensive fieldwork in many countries in southern Asia including Thailand, Myanmar, Indonesia, Vietnam, Cambodia, and India.



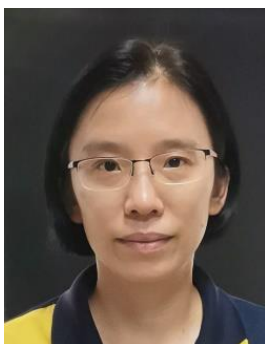
Speaker 2: Katsuki Nakai

Katsuki Nakai was born and raised in Osaka, spent his university years in Kyoto, and earned his MS and D.Sc. (animal ecology) from Kyoto University. He conducted fieldwork at Lake Biwa in Japan, focusing on two nonnative North American fish species, largemouth bass and bluegill. This research marked the beginning of his influential role in the legal and administrative management of invasive aquatic alien species in Japan. In 1992, he participated in the construction of the Lake Biwa Museum and retired from the museum in 2022, following an eleven-year tenure with the nature conservation department of the Shiga Prefecture government. Since 2022, he has continued to contribute as a reappointed staff member of the prefecture government and as a research fellow at the museum. He has also served on numerous national and prefectural advisory committees concerning strategies for nature conservation and invasive species management.



Speaker 3: Yoshinori Taniguchi

Yoshinori Taniguchi earned his BS in Agriculture from Meiji University (Japan), MS in Zoology from University of Wyoming (USA) and Ph.D. in Ecology from Hokkaido University (Japan). His expertise range freshwater fish conservation, control of invasive fish species, impacts of climate change on fish among others. Presently, he is a professor of Faculty of Human Studies, Meijo University (Nagoya, Japan). He enjoys taking his students to streams and lakes to research on fishes using seines, dip-nets, traps, and electrofishing units. He is also serving as a co-chair of the Japanese region of IUCN Freshwater Fish Specialist Group.



Moderator / Discussant: Jenjit Khudamrongsawat

Jenjit Khudamrongsawat is currently an associate professor at the Faculty of Science, Mahidol University, Bangkok, Thailand. She received the Ph.D. in biology from University of Alabama, USA, where she developed her interests in biodiversity conservation. She studies a variety of vertebrates across different disciplines such as ecology and population genetics to uncover their natural histories including those introduced outside their native habitats.
