

# Science and Technology Group Annual Report FY2018

Vladimir Dinets  
Science and Technology Associate

## 1 Introduction

I started working at OIST in August 2017. At that time I had a few ongoing research projects that are now completed and the results are being published. Since the beginning of work at OIST, I started a number of new projects; most of them are nearing completion.

## 2 Activities and Findings; Collaborations

Biology of Desert Mammals project, in collaboration with Boris Krasnov (University of Negev), Kris Helgen (University of Canberra), and Edward Weiss (IBPC): we conducted expeditions to Australia in February 2018 and December 2018 and to Morocco in July 2018, and are now writing the resulting paper *Rodent evolution in deserts: five independent scenarios*.

Wild rats of Japan project, in collaboration with Christian Vincenot and Jason Preble (University of Kyoto): we conducted over 30 field trips and are constantly getting new data. The resulting paper, *Nobles savages: the non-feral rats of Japan*, is to be submitted to journal *Mammalia* in 2019.

Mammals of Sarawak project, in collaboration with Itioka Takao (University of Kyoto): we have developed a proposal and obtained necessary permits from Malaysian authorities.

Solving the mystery of Ross's gull migrations project, in collaboration with Sergei Ohlopkov (IBPC, Russia), Sergei Kolenov (University of Tatarstan, Russia) and Mark Matfei (Arctic Gulls Research Center, Canada): I got a Kakenhi grant for this study, and we are planning to conduct the fieldwork in June 2019.

Endothermic insects project, in collaboration with Jenella and Scott Loye (University of California, Davis): this small project is a result of an accidental discovery I made during the expedition to Vietnam. I conducted more research in Borneo in April-May 2019, am planning to complete the work in summer 2019, and to submit the resulting paper to journal *Nature* in 2019.

Acoustic monitoring of Okinawa bats project, part of OKEON soundscape study: we have completed the preliminary research phase and have conducted regular data gathering since September 2019. The first paper, *Bats in modified habitats are more sensitive to extreme weather events*, will be submitted to *Journal of Mammalogy* in 2019.

Undescribed subspecies of Mandarin duck in Okinawa project is now conducted in collaboration with Sasha Mikheev's lab, and the resulting paper will be submitted to *Journal of Ornithology* in 2019.

Cephalopod behavior research: I've done a lot of play behavior research in the past, and am working with Michael Kuba on a small study of play behavior in squid and cuttlefish at Seragaki Marine Station.

## 3 Publications and other output

### Books:

Doody, S., Dinets, V., and Burghardt, G. *Secret Societies: Social Behavior of Reptiles*. After five years of work, the monograph was submitted to John Hopkins University Press on May 1, 2019, and

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is to be published later this year.

## **Journal articles:**

Dinets V. 2018. First record of the Chinese Crested Tern *Thalasseus bernsteini* in Japan. *Journal of Yamashina Institute of Ornithology* 50: 138-140.

## **Popular article:**

Dinets, V. 2018. Enemy at the gates. *Biosphere* magazine, issue #33.

## **Invited talks:**

*Swamp smarts: discovering cryptic intelligence in crocodilians*. Seminar, OIST, April 18, 2018.

*Invasive brood parasites: science, policy, and public awareness*. Lecture, Institute of Vertebrate Biology, Czech Academy of Sciences, Prague, July 19, 2018.

*Fieldwork with safety in mind*. Seminar, OIST, November 1, 2018.

*Interrupting cultural transmission as a tool for improving adaptability of reintroduced species*. Seosan Lakes Bird Research Center, South Korea, January 27, 2019.

*Field Studies of Animals*. Skill Pill, OIST, February 1, 2019.