

Science and Technology Group Annual Report FY2017

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 or nearing completion. Since the beginning of work at OIST, I started a number of new projects.

2 Activities and Findings; Collaborations

Projects started before 2017:

Behavioral ecology and conservation of Asian birds and mammals project, in collaboration with Nicholas Wilkinson (University of Oxford/WCS), Jeremy Holden (WWF), Kris Helgen (University of Canberra), Edward Weiss (IBPC, Russia), Michael Kosoy (CDC), and Nguyen Hoa Du (University of Vinh): we conducted an expedition to Annamite Mountains of Vietnam in January 2018. The expedition resulted in the first ever observation of saola (a critically endangered ungulate) in the wild by a zoologist (myself). In collaboration with native hunters, we installed over 100 camera traps in remote parts of Pu Mat National Park, and are now gathering data from them regularly. Publication of the first results is expected in 2019; we are also planning expeditions to Indonesia, Taiwan and China in 2018-2019.

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 to Morocco in July 2018; the final expedition to Australia is planned for December 2018.

Invasive Brood Parasites project, in collaboration with Mark Hauber (University of Illinois) and 12 other scientists in the US, Czech Republic, Finland, Russia and Estonia: this 4-year project is now completed and the final paper was published in 2018 (see below).

New projects:

Small mammals of Japan project, in collaboration with Christian Vincenot and Jason Preble (University of Kyoto): we conducted over 20 field trips and are constantly getting new data; first papers are expected in 2019.

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

Solving the mystery of Ross's gull migrations project, in collaboration with Sergei Ohlopkov (IBPC, 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'm planning to gather more data during planned expeditions to Asian tropics.

Acoustic monitoring of Okinawa bats project, part of OKEON soundscape study: we are finishing the preliminary research phase and will start regular data gathering in September 2019.

Bird banding station project: this long-term project, possibly in collaboration with Yamashina Institute,

Science and Technology Group Annual Report FY2017

Vladimir Dinets
Science and Technology Associate

is still in planning/permitting phase.

Mandarin ducks of Okinawa study: this is another small project stemming from an accidental discovery; I'm planning to submit the resulting paper before the end of 2018.

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; this work is also in early stage.

3 Publications and other output

2017 Dinets V. Surface foraging in *Scapanus* moles. *Mammalia* 82:48-53.

2017 Dinets V. Coordinated hunting by Cuban boas. *Animal Behavior and Cognition* 4:24-29.

2017 Dinets V, Sanchez M. Brown Dippers (*Cinclus pallasi*) overwintering at -65°C in northeastern Siberia. *Wilson Journal of Ornithology* 129:397-400.

2017 Dinets, V. First observations on the behavior of the flightless anomalure (*Zenkerella insignis*). *Zoology* 123:121-123.

2017 Dinets V. Roosting under tree leaves in Schwartz's Myotis (Chiroptera). *Neotropical Biology and Conservation* 12:232-234.

2017 Dinets V, Kolenov S. An undescribed New World warbler (Parulidae) in the mountains of Cuba? *Neotropical Biology and Conservation* 12:235-237.

2018 Dinets V, Hall J. Mammalwatching: a new source of support for science and conservation. *International Journal of Biodiversity and Conservation* 10:154-160.

2018 Dinets V, Sokolovskis K, Hanley D, Hauber ME. Striking difference in response to expanding brood parasites between birds of western and eastern Beringia. *Journal of Field Ornithology* 89:117-125.

I am also working on a book *Reptile Social Behavior* with Gordon Burghardt (University of Tennessee) and Sean Doody (Louisiana State University), to be completed by February 1, 2019.

I gave seminars at University of Melbourne, Monash University (Australia), and Institute of Vertebrate Biology (Prague) in 2017-2018, plus two talks at OIST. I am scheduled to teach a skill pill and give a seminar on research safety at OIST in November 2018.