

Progress Report: Conservation Implications of Blakiston's Fish Owl Resource Selection in Primorye, Russia

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Summary: This progress report, covering a six-month period (February-July 2008), summarizes activities conducted by the Blakiston's Fish Owl Project since funding was awarded by the National Birds of Prey Trust. During this period we made progress on our primary goal of developing a fish owl conservation plan by conducting and completing our 2008 target capture efforts, engaging in study animal monitoring, and monitoring nest success. We also collected morphological and blood samples, and made progress towards our secondary goals of increasing local Russian scientific capacity, and promoting fish owl awareness.

Progress and Achievements: The primary goal of this project is to develop a Blakiston's fish owl conservation plan for Primorye, Russia. During this reporting period we made significant steps towards meeting our first primary objective, which is to develop an understanding of Blakiston's fish owl resource selection. We captured five fish owls in February-April 2008, our minimum for the field season to be considered successful (Fig. 1). Two of these owls were outfitted with VHF transmitters, and the remaining three were given GPS dataloggers. Two of the GPS-tagged owls were recaptured to determine the effectiveness and reliability of these units; one produced >150 high-quality locations (accuracy from 5-30 m), whereas the second produced far fewer (see **Difficulties Encountered**, below). An example of these GPS location data are shown in Figure 2.



Figure 1. The Serebryanka male with prey (dwarf form of Masu salmon) in late March, 2008.

We also made significant steps toward our secondary project goals of (1) increasing local scientific capacity, and (2) increasing fish owl conservation awareness. We hired a total of six field assistants for work with fish owls during 2008. These assistants were trained in a variety of skills, including VHF data collection, fish owl survey techniques, prey analysis, study animal capture, restraint, and harness attachment. Two current employees of the Wildlife Conservation Society's Siberian Tiger Project, both Russian graduate students at the Russian Academy of Sciences Institute of Biology and Soils in Vladivostok, were also trained in fish owl survey techniques and we hope to include them in future fish owl studies. Additionally, there is a Russian graduate student from Moscow State University coming to train with our project in August-September 2008.

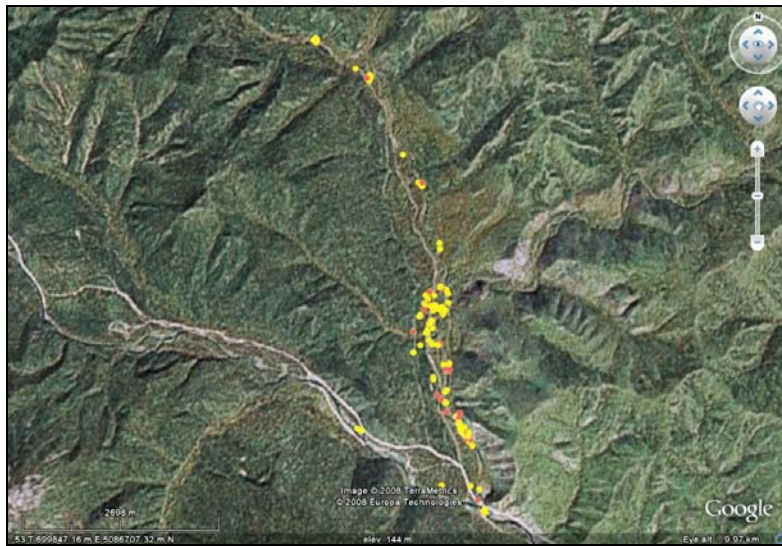


Figure 2. Locations of the Leonovka Female Feb-April 2008. The owl appears to stay very close to open ice patches on the Leonovka River in winter, with furthest distance travelled ~8 km.

In regards to conservation awareness, a local forestry department initiated contact with us regarding how to harvest forests with minimal impact on fish owls. We have subsequently provided them with preliminary information, and will supply more detailed information as it becomes available. Also, we began the development of an informational brochure for distribution to the public in Ternei, Artyomovo, and Amgu with the goal of reducing poaching.

We have had a variety of exposure in the national (Russian) and international (mostly USA) media:

- A popular article (in Russian) about fish owls and this project appeared in the print and on-line versions of the 01 May 2008 issue of Vestnik Terneya, a widely-read Ternei County newspaper (<http://vestnik.terney.info/content/view/614/40/>).
- The National Aviary (Pittsburg, PA, USA), who provided funding in 2008, published a short piece about this project: (<http://www.aviary.org/nlet/FlightPathSpring2008.pdf>).

- One scientific article was published in March 2008: SLAGHT, J.C. AND S.G. SURMACH. 2008. Biology and conservation of Blakiston's fish owls in Russia: a review of the primary literature and assessment of the secondary literature. *Journal of Raptor Research* 42: 29-37.
(<http://www.fishowls.com/Slaght%20and%20Surmach%202008%20Biology%20and%20conservation%20of%20Blakiston%27s%20fish-owls%20in%20Russia.pdf>)
- We gave 6 presentations about our work in Russia, China, Japan, and the United States throughout the funding period.
- I consulted on a new exhibit at the Minnesota Zoo (Apple Valley, MN, USA) entitled "Russia's Grizzly Coast", which opened 07 June 2008. My involvement resulted in the inclusion of a life-sized, bronze fish owl statue for display in the exhibit (Fig. 2).
- The project website (www.fishowls.com) has continued to be an excellent educational tool, with more than 2,400 visitors from 46 countries since the site was developed in autumn 2006.



Figure 3. Bronze statue of fish owl at Minnesota Zoo, added to the exhibit due to J. Slaght's role as consultant in exhibit design. This is an excellent tool for conservation awareness, as most visitors to the zoo have never heard of a Blakiston's fish owl.

Funding Expenditures: Funding from the NBPT was granted for equipment purchases, specifically GPS dataloggers and a laptop computer. Dataloggers were ordered in June 2008, however there is a six-month projected turn-around time so we anticipate having the units in hand for deployment during our next capture season in early 2009, as expected. A laptop computer (Dell XPS model m1330) was purchased in June 2008.

Difficulties Encountered: Recapturing our second GPS-tagged owl proved difficult, as she turned out to be an incubating female (Fig. 3). As a result, we had to wait nearly two months until her single chick had hatched and she once again resumed normal hunting activities. Once she regularly left the nest however, high water conditions and frequent rains made capture conditions difficult. Ultimately, we were able to successfully capture her, recharge the GPS datalogger, and rerelease her in early June to continue to collect data. However, given that she sat in a nest cavity for much of the data collection period, few locations were acquired.

Activities Anticipated Next Reporting Period: We were able to extend the size of our study area in 2008 to nearly 3,500 km²; in 2009 (with assistance from NBPT funding) we expect to more than double the size of our study area to 8,000 km², which will greatly increase the inference that can be drawn from this study. We hope to capture up to eight more fish owls between January-April 2009, and outfit all of them with GPS dataloggers. These owls will then be recaptured in winter 2010 for data download.



Figure 4. The Granatnaya female flushes from her nest cavity. Due of the potential stress associated with recaptures, we did not attempt to recapture this bird until after her chick hatched.