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HISTORY OF THE USE OF KAWISHIWI FIELD STATION
AS HEADQUARTERS FOR RESEARCH

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The purpose of this statement is to document the past and present value of the Kawishiwi Field Station (K. Lab) complex to field research related to the Superior National Forest (SNF) and the Boundary Waters Canoe Area Wilderness (BWCAW).

K. Lab has been used as a headquarters for research by various agencies for about 40 years (Table 1). Several attributes make it an ideal location as a staging area for such research: (1) the completeness of its accommodations in the form of sleeping, eating, and office facilities, storage areas, garage, and shop; (2) proximity to the central SNF and the BWCAW; (3) proximity to the community of Ely, (4) proximity to airport and seaplane bases, and (5) its uniqueness as the only suitable field research headquarters north of Duluth and east of Grand Rapids, and west of Grand Marais.

Because of K. Lab's ideal properties for field research in the SNF, many types of studies have been headquartered there (Table 2). To my knowledge, the first research headquartered at K. Lab was that sponsored by the North Central Forest Experiment

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Station (NCFES) (now North Central station) on the forest fire history, plant ecology, and recreational use of the BWCAW starting about 1966. The work was conducted primarily during summer, and the researchers were housed in the log cabin along the shore and in two mobile homes (since removed) on the complex.

In 1967, the eastern timber wolf (*Canis lupus lycaon*) was listed by the U.S. Fish and Wildlife Service (USFWS) on the federal Endangered Species List (ESL), and I began to conduct pilot research in the SNF under the auspices of Macalester College. In 1968, the USFWS, and NCFES contributed funding to this research, and NCFES assigned Dr. Robert Ream to assist with it. NCFES also invited the project to headquarter out of the main lodge at K. Lab. In 1969, the USFWS hired me to continue with the wolf research. Since then, the division of the USFWS that administered the wolf research had its name and even its lead agency changed several times, but was always part of the Department of the Interior (DOI), so for simplicity this document, the sponsoring agency for the wolf research will be identified as the DOI.

As the value of K. Lab as a headquarters for field research became increasingly apparent, the University of Minnesota (UMN) also sought NCFES approval for its use. Thus UMN research in the SNF on moose (*Alces alces*), white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), ravens (*Corvus coyax*) and loons (*Gavia immer*) began, with several graduate students receiving master's and doctoral degrees based on this research (Tables 3,4).

Meanwhile, the DOI wolf research expanded. Additional personnel were added, and research on the wolf's main prey, the white-tailed deer, became an integral part of the research. DOI also conducted incidental research on the American marten (*Martes Americana*) and the Canadian lynx (*Lynx Canadensis*).

NCFES then changed the emphasis of its field research in the area from plant to wildlife-oriented work. Thus the station invited me and my secretary to office at NCFES in St. Paul (1973) to collaborate with its wildlife staff, and I was also invited to become an adjunct professor at the UMN. As part of this shift, NCFES began research out of K. Lab on black bears and beavers (*Castor canadensis*) and continued surveying forest visitors for information about forest recreation.

We continued DOI-sponsored research on wolves and white-tailed deer throughout the 1970's, 1980's, 1990's, and the 2000's to the present, headquartering out of K. Lab and with supplemental flying supplied by the SNF. The wolf research employed the latest technologies and techniques and developed new ones. Thus wolf biologists from around the world visited K. Lab, often for months at a time, to learn these new research approaches (Table 3).

As a result of the availability of K. Lab as a headquarters for field research in the SNF, hundreds of scientific articles, books, and monographs have been published as listed in the bibliography at the end of this document.

The wolf remains on the Endangered Species List, but was most recently proposed in March 2006 for delisting. A final delisting decision is expected in March 2007. However, an attempt to reclassify the wolf in Wisconsin and Michigan a few years ago in preparation for delisting in Minnesota, Wisconsin, Michigan and surrounding area was overturned by a court judgment. Litigation is also expected in response to the next final delisting decision, so it is unknown whether that decision will hold.

In any case, after delisting, the federal government remains obligated to monitor wolf recovery for 5 years. In addition, a separate wolf delisting proposal is proceeding in the West, and a controversial wolf reintroduction is underway in the southwest. Information (and trained

personnel) resulting from wolf studies in the SNF headquarters at K. Lab is often valuable to these other DOI programs. Thus there continues to be a need for continuing the SNF wolf research program, and K. Lab remains the only suitable headquarters for staging this work.

Table 1. Institutional Collaborators with Research at Kawishiwi Field Lab

- University of Minnesota
- International Wolf Center
- Natural Resources Research Institute
- Minnesota Department of Natural Resources
- Vermillion Community College
- USDA Wildlife Services
- Superior National Forest
- North Central Forest Experiment Station
- Macalester College

Table 2. Past and present field research use of Kawishiwi Lab

- Plant ecology studies – Ohmann et al.
- Forest fire history studies – Heinselman et al.
- Social science and human dimension studies of wilderness use – Lime et al.
- Moose studies – Peek et al.; Lenarz et al.
- Black bear studies – Rogers
- Beaver – Buech
- Loon studies – Cuthbert et al.
- Environmental impact of mining studies – Huemphner et al.
- Wolf, deer, lynx – Mech, Nelson et al.

Table 3. Students whose Master's research was headquartered out of Kawishiwi Lab

- L. Irwin
- V. Van Ballenberghe
- R. Hoskinson
- M. Nelson
- K. Kunkel
- R. Rothman
- N. Demma
- H. Hertel
- D. Groebner
- J. Wetzel

Table 4. Students whose Ph.D. research was headquartered out of Kawishiwi Lab

- J. Peek
- L. Rogers
- D. Bruggers
- M. Nelson
- R. Peters
- F. Harrington
- G. DelGiudice
- R. Buech

Table 5. Countries which have sent trainees to Kawishiwi Lab

- Argentina
- Australia
- Austria
- Canada
- Croatia
- Denmark
- Great Britain
- India
- Israel
- Italy
- Mexico
- Netherlands
- Norway
- Poland
- Portugal
- Russia
- South Africa
- Spain
- Sweden
- Turkey

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