

## **Report on Bio-Blitz 2005**

Bio-Blitz 2005 in Waterton Lakes National Park (WLNP) was the fifth annual Bio-Blitz sponsored by the Biological Survey of Canada (Figure 1). The previous four Bio-Blitzes took place in predominantly grassland sites (Onefour, Alberta; Tall Grass Prairie Reserve, Manitoba; Peace River grasslands, Alberta; Aweme, Manitoba). The event in WLNP was, therefore, the first to include nongrassland ecosystems.

Several different ecological regions meet in WLNP, with biota of the Great Plains, northern Rocky Mountain, and Pacific Northwest overlapping within the park's boundaries. The park's four natural subregions—foothills parkland, montane, subalpine, and alpine—embrace 45 different vegetation types, including grasslands, shrublands, wetlands, lakes, spruce–fir, pine and aspen forests, and alpine areas. This high ecosite richness offered a wealth of arthropod-collecting opportunities that were embraced enthusiastically by 27 energetic participants, who collectively covered most of the park between 7 and 12 July.

Parks Canada personnel working in WLNP, in particular Conservation Biologist Cyndi Smith, were very supportive of this event and provided much in-kind support in the form of access to the

research house (used as Bio-Blitz headquarters), free group camp sites, free park access and research permits, maps, and copious helpful advice. Collecting efforts afforded many opportunities to educate the general public about arthropods, biodiversity, and the importance of protected lands. Many Bio-Blitzers also participated in the annual WLNP butterfly count.

Some participants have already identified their collections and have submitted the data to a common database managed by WLNP. Thus far, there are many new records for the park and Alberta and even a few new records for Canada. For example, of the approximately 305 species of macro-moth species collected, the vast majority are new records for the park, 17 are new provincial records, and 1 is a new Canadian record. All data will eventually be accessible to the public, and specimens are being deposited in publicly accessible collections. Many Bio-Blitz participants have expressed strong interest in continuing to work in WLNP, and a group of moth enthusiasts returned for a visit in August 2005. We hope that the 2005 Bio-Blitz experience may give rise to a more long-term arthropod biodiversity survey of WLNP.



Figure 1. Waterton Lakes National Park, site of Bio-Blitz 2005. Left to right: Joe Shorthouse, Felix Sperling, Rob Roughley, and David Langor holding the flag of the Biological Survey of Canada (photo by Andrea Renelli).