Touring the Suffield National Wildlife Area

BY CHRIS HAVARD

A small group of AWA staff and supporters met early in the morning of August 1 in Ralston, Alberta for a guided tour of the Suffield National Wildlife Area (SNWA). This was a very special occasion as few non-military people have this opportunity and we were accompanied and guided in our yellow school bus by Drew Taylor, Range Biologist at Suffield.

The Suffield National Wildlife Area, located within the boundaries of Canadian Forces Base Suffield, comprises 458 km^2 of largely undisturbed prairie grassland along the South Saskatchewan River. This area was designated as a National Park from 1922 until 1938. In 2003, it was established as a NWA under the *Canada Wildlife Act*. The Department of National Defence administers and controls the area.

The Suffield Block, about 2,690 km^2 of marginal agricultural land had little successful settlement due to its semi-arid climate; the federal government expropriated it from the province in 1941. For the next 30 years the area was used for various military training and research purposes. In 1971 a ten-year agreement was signed with Great Britain to allow the British Armed Forces to use the northern three quarters of the Suffield Block for armoured, infantry, and artillery live-fire training. This shared-used agreement with the Canadian Forces has been extended indefinitely since 2006.

Our first stop was at an overlook of the South Saskatchewan River where Bill Taylor, a retired Canadian Wildlife Service habitat biologist, gave us an overview of the history of protected areas ecological management. It's been 125 years since the first protected areas program for wildlife was introduced. He discussed the fluvial, glacial, and eolian landforms, and habitats that occur in the SNWA. He pointed out the many landslumps along the South Saskatchewan River below us. These landslumps, in combination with the riparian vegetation along the river, create excellent habitat for reptile hibernacula (hibernation sites). The participants spent some time appreciating the expansive river views, and the prairie grasses and flowers before attacking the more important job of freeing our school bus from the sandy substrate of this narrow track.

We next drove north along the southwestern edge of the Wildlife Area. There Janet Ng, a PhD candidate from the University of Alberta, gave us a presentation on hawks. Janet has been working on a project studying ferruginous hawks for several years and described the SNWA as a highly desirable working area due to the beauty of the grasslands, the abundance of wildlife, the cooperation of the base, and the good fortune to be one of the few to access these lands. With small digital cameras mounted near the nests and very small GPS satellite transmitters worn by the birds, her group is studying hawk movements to determine how they are using the habitat and the effects of external influences on their behaviour. She mentioned that they often see survey stakes incorporated into their huge nests! Many of us had the chance to use some clever gadgetry to peer into an unoccupied badger hole, a common site for nesting burrowing owls. The Burrowing Owl Project team devised this equipment (hosing, goggles, and a lighted plumber's snake. There were no burrowing owls present but we could clearly see the burrow walls and plant roots.

Our lunch stop was at another outlook over the South Saskatchewan River. Participants wandered through the grass and sage-brush to a fenced area protecting a medicine wheel where more photographs were taken of the river below, the sloping coulees, and the glacial erratics collected by aboriginal peoples to form the stone circle and extending rays. Lunch was a famous fabulous feast courtesy of the resident chefs at AWA's Calgary office

Our afternoon stop was towards the northeast into an area with a view of sand dunes. When Dr. John Palliser visited this area, these dunes were actively moving across the prairies at a rate of up to a metre per year. Removing bison from the landscape probably had a significant effect the rates of dune stabilization. Today, they are mostly stabilized.

Corey Scobie presented an overview of sand dune dynamics and kangaroo rats. The Ord's kangaroo rat is a species with a range from Mexico to its northernmost point in the SNWA. It differs from its members further south by being up to 50 percent larger with the ability to use a form of torpor where body temperature can be dropped to below freezing, probably as a hibernation strategy. In contrast with southern rats which breed during one period defined by spring rains, our northernmost rats reproduce whenever possible, sometimes all year around.

Scobie is concerned because the kangaroo rats depend upon actively eroding sand dunes for their survival. Studies show that kangaroo rats are declining, probably due to changing sand dune dynamics with a loss to 40 percent of active sand dunes in recent decades. Scientists predict that all sand dunes will be stabilized by 2014. Dr. Darren Bender explained that erxperimental techniques suggest that fire and increased ungulate grazing can combat stabilization but generally the dunes restabilize after about three years. The base at Suffield has some interest in introducing fire to these areas to help provide a better habitat for the kangaroo rats.

We returned to Calgary with memories of big sky, rolling grassland, grazing pronghorn, wheeling hawks, and soft winds. We were impressed with the scientists' enthusiasm for the projects in this special landscape. We gained a new appreciation for the ecological benefits of the Canadian government's decision to create a military training facility in this area, effectively blocking rampant industrialization from disturbing this prairie grassland.