

# Beaver Hills area named UNESCO biosphere reserve

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Glynnis Hood, professor of environmental science at Augustana Campus, lives near Lake Miquelon and guides students' research in the wetlands of the Beaver Hills area.

An ecologically rich area of Alberta that is home to a University of Alberta research station and fertile ground for dozens of researchers over the years has won international recognition.

Home to a mix of preserved wetlands, green rolling hills and dense boreal forests, the Beaver Hills area east of Edmonton has been designated as a United Nations Educational, Scientific and Cultural Organization (UNESCO) [Biosphere Reserve](#), under its [Man and the Biosphere Programme](#). The area joins a network of 669 sites in 120 countries that foster ecologically sustainable human and economic development. Researchers from various faculties at the U of A have conducted dozens of studies there over the last 30 years, focused on work ranging from wildlife and outdoor recreation to wetlands and land management.

"University of Alberta research has benefited from the Beaver Hills area in many ways," said Guy Swinnerton, professor emeritus in the Faculty of Physical Education and Recreation and chair of the [Beaver Hills Initiative](#) Protected Areas Working Group. Swinnerton, who has enjoyed the Beaver Hills area as both a hiker and a researcher for many years, assisted in the nomination process for the UNESCO designation.

He began taking students to the area in 1978 while teaching courses about protected [areas](#) and outdoor recreation. "Beaver Hills has different types of protected areas, and it's that whole mosaic that is important," he said.

The Beaver Hills Biosphere Reserve becomes the second area of Alberta to win UNESCO designation, after the Waterton Biosphere Reserve in 1979. Home to the U of A's [Augustana Miquelon Lake Research Station](#), the biosphere's 1,572 square kilometres also encompass Elk Island National Park, Miquelon Lake Provincial Park, Cooking Lake-Blackfoot Provincial Recreation Area, the Ukrainian Cultural Heritage Village, the Ministik Lake Game Bird Sanctuary and the Strathcona Wilderness Centre.

With its well-preserved, protected parklands and forests sitting next to

surrounding farms and residential subdivisions, the Beaver Hills biosphere provides opportunities for university researchers and government scientists to investigate, through comparative studies, how to protect biodiversity and practise sustainable development within the lived-in landscape.

"It's this total landscape approach that demonstrates how we have to work collectively to find balance between conservation and sustainable development," Swinnerton said.

"It's a hidden gem," added Glynnis Hood, an associate professor of environmental science based at the U of A's Augustana Campus. "Beaver Hills is spectacular because of its subtle beauty. There are ecological surprises around every corner, because you're not looking for the big features like mountains, but for the small surprises." One of those surprises is the fisher, a weasel thought to be gone from the area that seems to have a healthy population and is now the subject of a collaborative University of Victoria study involving Augustana Campus.

"The Beaver Hills biosphere offers a rich opportunity to keep exploring questions that are right in our own backyard," said Hood, who lives near Miquelon Lake and has for years guided students in researching area wetlands. She's also studied human-wildlife conflicts and is currently researching low-impact wetland management practices.

Last year she and colleague Glen Hvenegaard led the first field course in environmental science and ecology at the Miquelon Lake Research Station, which opened in 2015. The 17-day course, which will be offered biannually, gave U of A students the chance to appreciate the Beaver Hills area's rich diversity as they studied everything from park interpretation to muskrats to soil science. "It was a great way to get the students to really live in the landscape and understand it intimately through research," Hood said.

The UNESCO designation affirms the Beaver Hills Biosphere Reserve as a world-class discovery ground that, through the work of U of A researchers and other groups, is yielding insights into global problems.

"It demonstrates grassroots excellence and honours the commitment of organizations and people in solving conservation and [sustainable development](#) problems on the ground," Swinnerton said.

Provided by University of Alberta

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