

Ontario moose turned loose in Michigan

The province of Ontario, Canada and the US state of Michigan have exchanged 30 moose from the province for 150 wild turkeys from the state as part of the joint agreement to enable Michigan to re-establish a moose herd in the Upper Peninsula where they were once plentiful.

The exchange, which has been under consideration for ten years, was described by scientists as the largest wildlife exchange between Canada and the United States.

The ten bull moose and 20 cows were selected from Algonquin Provincial Park, northeast of Toronto, where there are an estimated 4 000 moose. All of the cows except one, were pregnant. It is hoped that these moose and their descendants will breed up to 1 000 moose by the year 2000 in the Upper Peninsula area.

Although moose are native to the Upper Peninsula, they nearly vanished about the turn of the century because of uncontrolled hunting and an expanding deer herd that carried a brainworm lethal to moose. There are few deer in the area where the moose are being freed.

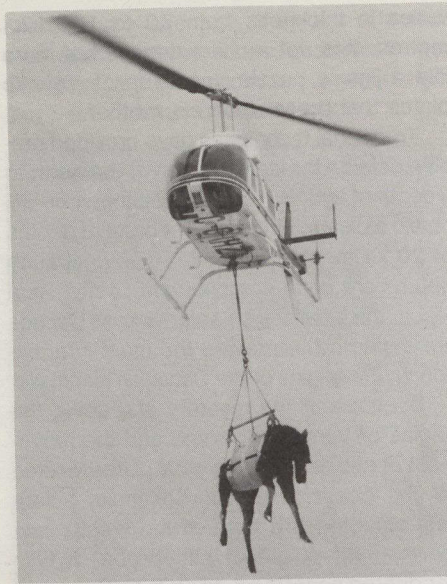
Flying moose

Financed by the Michigan government, a team of about 20, including pilots, veterinarians, biologists, technicians and truck drivers worked around the clock during the ten-day operation in Algonquin Park to capture the moose.

Every morning, Michigan's wildlife veterinarian, Steve Schmitt, and a pilot boarded a helicopter with a tranquillizer gun, vials of the powerful narcotic carfentanil, muscle relaxants and antidotes to reverse the effects of the tranquillizer. On a typical flight, they would stay close to a lake where it was easier to shoot a moose and land the helicopter.

After a moose was shot with a four-inch tranquillizer dart in the large muscle of its hip, it would collapse on the ice within seven minutes. The dart wound was then treated and the animal's temperature taken. Foam rubber was put in the ears and ointment rubbed on the eyes to protect them from the cold wind during the flight back to the base. Also a hood was draped over the moose's head in case it revived while in the air.

With the arrival of another helicopter, the moose was wrapped in the sling that carried it to the base at Mew Lake campground. Within minutes, the moose was airborne, dangling in the sling suspended from the helicopter. Travelling at speeds between 112 to 120 kilometres per hour, the team tried to make sure the trip was



A moose dangles in a sling suspended from a helicopter that took it from Opeongo Lake to Mew Lake in Algonquin Park.

Paul Latour, The Citizen

no longer than 13 kilometres.

At the base camp the ground crew took the temperature, blood pressure, and blood samples and injected drugs to reverse the tranquillizer in each moose. Veterinarians also tested for tuberculosis and brucellosis, a bacterial disease that causes recurrent fever, as well as pregnancy tests on the cows.

The body measurements and weights were an important part of the program as it was the first time scientists have gathered data on live moose. One of the most surprising findings was that each moose weighed between 800 to 1 200 pounds. This was about 200 pounds more than expected.

Once the tests were complete, each moose was given a final injection and then loaded into a specially-designed crate for an 18-hour truck trip to Michigan.

Oil drilling intensified

The Cold Lake, Alberta oil sands development project undertaken by Esso Resources Canada Limited of Calgary could enter the fifth and sixth stages four years ahead of schedule.

With lower construction costs and a strong export market, Esso, the exploration and production sector of Imperial Oil Limited of Toronto, has applied to the Alberta Energy Resources Conservation Board to have the schedule pushed forward. If approved, Esso spokesman Kasandra Milne said the drilling of additional wells should begin by June.

The project, which began in mid 1983,

was for Esso to develop two phases at a time, each totalling about 19 000 barrels a day, with six phases completed by 1990. The company got permission last June to start the third and fourth phases, pushing the schedule forward three years to 1987.

Mr. Milne said the latest acceleration will allow completion of the fifth and sixth phases by the end of 1986, when the project's total bitumen production will reach about 57 000 barrels a day.

Cartilage repair technique

A surgical technique developed at the University of Saskatchewan in Saskatoon may make it possible to repair torn knee cartilage, a serious injury incurred by 200 000 North Americans every year.

Dr. Feroze Ghadially, a pathologist at the university, first proposed the treatment. He has studied knee-cartilage injuries for about 20 years and during examinations of human cartilage samples with an electron microscope he noticed healing activity in some cells. He theorized that the healing must have occurred when tissue from a membrane that surrounds the knee joint came in contact with the cartilage.

Dr. John Wedge, head of the university's department of orthopedics, developed a procedure for cutting a flap from the membrane to match the tear on the cartilage. The flap, which remains attached to the membrane, is then stiched into the injury. A material that resembles cartilage develops to heal the tear.

Further research

Dr. Wedge has used the procedure to heal torn knee cartilages in sheep. Before the method is used on patients, however, Dr. Ghadially wants to conduct further research to determine whether the healed cartilage will last.

The meniscus, a crescent-shaped cartilage, is frequently torn by athletes who rotate their bodies on one foot without lifting their heel from the ground. It causes the knee to lock, effectively crippling the victim unless the cartilage is removed. Unlike many other body tissues, damaged cartilage does not regenerate to heal itself.

Arthroscopy, a close-circuit television technique that allows surgeons to perform knee surgery through a quarter-inch incision, is now frequently used to remove torn cartilage.

But about 50 per cent of patients who have their knee cartilage removed develop severe arthritis within five to ten years, and another 40 per cent will usually develop milder cases of arthritis.