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## U of L scientists to be featured on The Nature of Things

The research work of three University of Lethbridge scientists will be highlighted in Thursday's episode of The Nature of Things.

The popular program hosted by David Suzuki airs on CBC Television and presents science stories in an engaging and informative way. <u>Think Like an Animal</u> features research on hummingbirds and primates conducted by Drs. Andrew Hurly, Louise Barrett and Sergio Pellis.

This past summer, director Leora Eisen and a camera crew from 90th Parallel Productions spent several days on campus, at the U of L's Westcastle field station and at a monkey reserve in South Africa, to explore the innovative ways U of L professors are delving into the animal mind.

"For many years, scientists have judged the intelligence of animals by comparing them to us," says Eisen. "But, as Prof. Barrett told me, perhaps it's time to take off our human-centred spectacles and look at how animals think in a new light — to understand how smart they are as themselves."

"We have this wealth of people studying animal behaviour at the University and that's really impressive," says Barrett. "For our work to be shown on The Nature of Things is significant."

Hurly has studied the behaviour of hummingbirds to learn about their cognition and Barrett and Pellis have studied the behaviour of primates, including vervet monkeys.

Hurly's research on hummingbird cognition illustrates how the tiny birds rely on spatial information to find food. He and colleague Sue Healy, from the University of St. Andrews in Scotland, placed eight artificial flowers filled with a sugar solution inside a wild hummingbird's territory in the Rockies. After visiting four flowers, the researchers timed how long it took for the bird to return. Almost like clockwork, they found it returned in 10 to 15 minutes.

"We wanted to know if it could remember the flowers it had emptied and go only to the flowers it hadn't yet visited," says Hurly. "The answer is yes, they, upon return, were quite good at avoiding flowers that they'd already emptied."

The film crew used a special camera to capture hummingbird movements in high definition slow motion.

"The footage is breathtaking," says Eisen.

Barrett and Dr. Peter Henzi, a U of L psychology professor who also studies primate behaviour, conduct research with three different vervet monkey troops in South Africa. A film crew accompanied the research team to the site and filmed vervets living their everyday lives in the wild — grooming, playing and reacting to vocal calls.

"Louise Barrett is one of those rare academics who can explain science in a way that viewers can understand," says Eisen. "She provides real insight into the complex problem-solving skills of these highly social animals."

Pellis has analyzed vervet monkey play and, in *Think Like an Animal*, he shares his insights into the processes that build a thinking brain. Young vervets will create unpredictable situations during play and those uncertainties challenge the prefrontal cortex, the area of the brain involved in problem solving and complex planning.

"Animals that have much more complex social decision making are also the ones that tend to use play for such training," says Pellis.

When: Thursday, Nov. 24, 8 p.m. on CBC

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