

# Scientist studies Muskrat decline



Stewart Burnett/NNSL Photo

## ELDERS CURLING WITHOUT ICE

William K. Allen takes a shot during the elders curling without ice event on Nov. 23 at the Ingamo Hall.

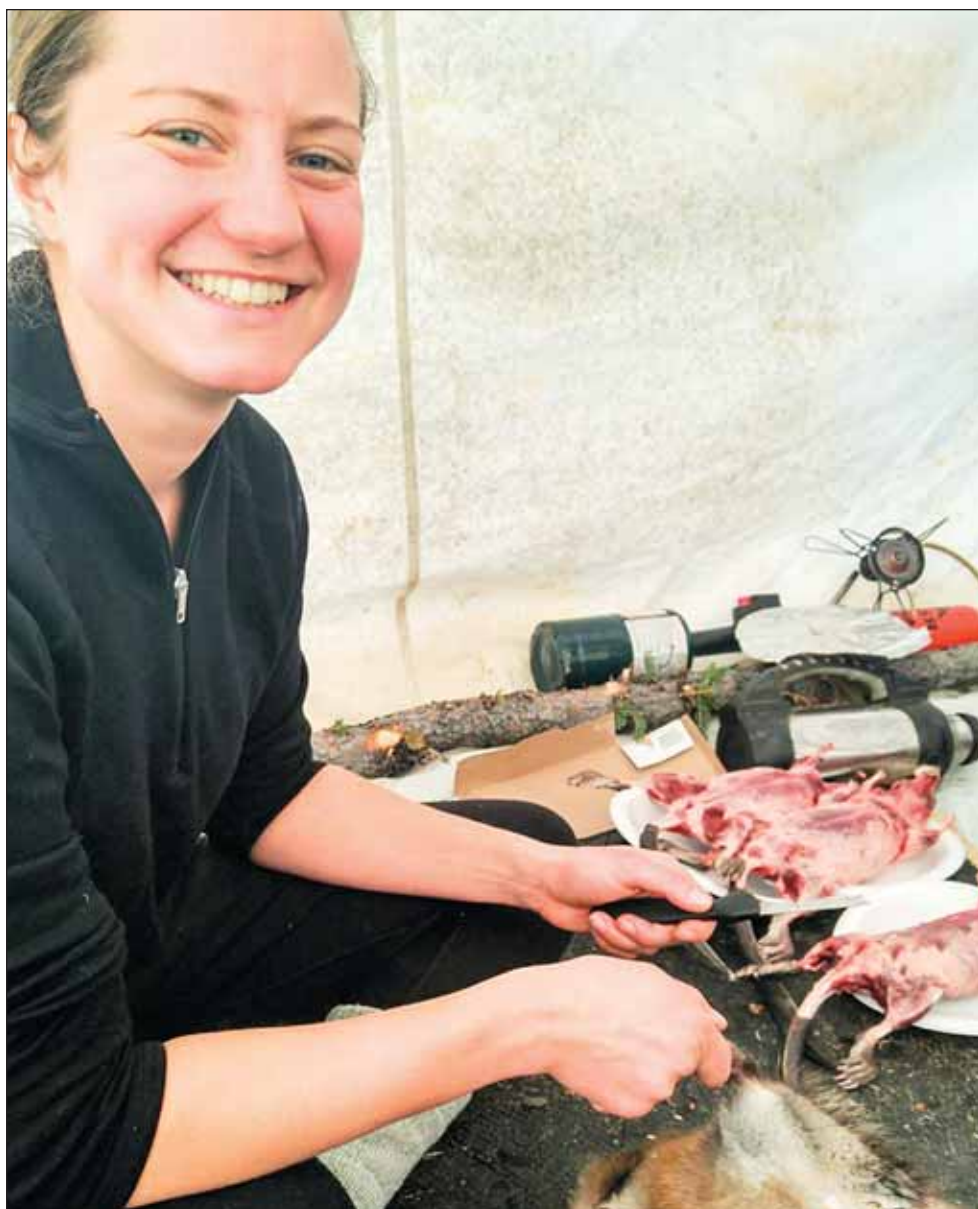


Photo courtesy of Chanda Brietzke

**Chanda Brietzke is pictured** here skinning a muskrat. She is researching the decline in muskrat populations in the delta, while another project by Tracey Proverbs looks at change in fishing trends in the area.

Northern Arts Cultural Centre 2016/17

## FRONT AND CENTRE

BROKEN HEARTS AND MADMEN PROJECT  
A mix of Latin, jazz and classical

The Gryphon Trio and Patricia O'Callaghan

"A truly exceptional blend of natural expressiveness and masterful coloration."  
Billboard Magazine

## Linked research projects will include fish population trends in Mackenzie Delta

by Stewart Burnett  
Northern News Services

Two connected research projects are investigating the decline of muskrat populations in the Mackenzie Delta and changes in fish trends.

One paints a starker picture than the other with muskrat populations widely reported to be in a decline, while fish populations seem healthy but with some environmental changes underway.

"Essentially the big question, and the reason we're doing all the research, is trying to find out why there's a decline," said Chanda Brietzke, an environmental studies graduate researcher at the University of Victoria who recently presented the current status of her project at the Aurora Research Institute.

To approach the subject from all angles possible, Brietzke studies everything from land and air surveys to interviews with trappers and carcass collection. On aerial and land surveys, Brietzke looks for "pushups," a term used to identify mounds of vegetation on the ice signifying a possible muskrat home.

Since 2014, Brietzke has talked to 20-some trappers in the region and said she's heard a lot of different perspectives on why there's been a decline in muskrat populations, but no clear consensus.

It sounds like lakes have been draining out into the delta more commonly, she said, along with water level changes in the rivers, which could be affecting muskrats. Ice patterns and the timing of breakup and flooding have been changing as well.

"People talk a lot about otters," said Brietzke.

Otters hadn't been in the delta until fairly recently.

"They're definitely increasing in number and they're a pretty voracious predator of the muskrats. Lots of people talk about the otters as being around the same time as (muskrat) population started to decline."

She'll be back in town in January to continue her research.

For fish populations, University of Victoria graduate research student Tracey Proverbs, who also presented to ARI, said populations seem healthy in terms of numbers.

Proverbs's project looks at how fishing and its place in people's lives and livelihoods in the Beaufort Delta has changed. It is part of a wider project that is also studying deltas in Brazil and Thailand.

People in the region are seeing a lot of river erosion with more sandbars appearing, she said.

"People were saying that there are not less fish – there are lots of fish and they're pretty healthy it seems like – but some of the things that people were noticing and wondering about is (on) some of the fish, they've noticed spots on (their) livers," said Proverbs.

She's also heard worry about contaminants in the rivers, possibly coming from Alberta.

Like Brietzke's, Proverbs's research will continue next year, when she hopes to spend most of the summer in the region studying fish and both recreational and subsistence fisheries.

Anyone interested in contributing to the research can contact Brietzke or Proverbs at [ckbrietzke@gmail.com](mailto:ckbrietzke@gmail.com) and [traceyp@uvic.ca](mailto:traceyp@uvic.ca) respectively.

FORT SMITH  
St. Joseph Cathedral  
Dec 5 | 7:30 pm

NORMAN WELLS  
Dennis Drolet Memorial  
Community Hall  
Dec 6 | 7:30 pm

INUVIK  
Our Lady of  
Victory Church  
Dec 8 | 7:30 pm

FORT SIMPSON  
Bompas Elementary  
School gym  
Dec 12 | 7:30 pm



Tickets: \$25 Senior \$15 Youth \$10

Box Office (867) 766 - 6101 See website or call for details NACCNT.CA

Thank You to Our Sponsors!



Community Supporters

Janor Guest House and the Willows Inn . Visual Effects . Gourmet Cup . Legges Construction Ltd  
Bill Braden Photography . Open Sky Creative Society . Twist Bar and Grill . Fiddles & Stix Music Centre Ltd.  
Old Town Glassworks . KopyKat North . Arctic Alarm/DiamondTel . Rebecca's Flowers . Yellowknife Book Cellar  
Northern Life Museum and Cultural Centre