

UNIVERSITY of ALASKA  
HUMAN RESOURCES  
UAA UAF UAS

RESEARCH PROFESSIONAL 4

[Click Here for Details & Requirements](#)



FAIRBANKS  
Daily News - Miner

newsminer.com



54°  
Broken  
Clouds

View Forecast

Home Arctic Cam News Obituaries Opinion Photos Features Sports Classifieds Marketplace Subscribe Contact Us Submission Forms

Welcome to the site!  
Login or Signup below.

[Login](#) | [Signup](#)

Home Features Sundays Alaska Science Forum

# Fifty years of far-north biology

Story **Comments**

Print Font Size:



Ned Rozell photo

Posted: Saturday, August 31, 2013 11:45 pm

Ned Rozell / Alaska Science Forum | 0 comments

FAIRBANKS — While waiting for the talking to begin in darkened auditoriums, I sometimes scan the room, counting heads.

“I’ve interviewed him, and her, and him. And her.”

At last week’s dedication of the Institute of Arctic Biology’s new building on the University of Alaska Fairbanks campus, I saw more than a dozen people who have appeared in this space since fall 1994 (when I took over this column from Carla Helfferich).

I’ve written a lot of words about these biologists because we still know so little about far-north creatures and how they

survive here, and Institute of Arctic Biology people have discovered things we did not know. One example is where chickadees roost during winter (often in tiny holes in birch trees, Susan Sharbaugh found).

Another is that our rugged version of Alaska wood frogs can survive colder temperatures than Lower 48 wood frogs, which live as far south as Georgia (Brian Barnes and his physiology class uncovered that one).

Barnes, who also discovered that Toolik Lake ground squirrels’ body temperatures sometimes dip below 32 degrees Fahrenheit (getting the ground squirrel on the cover of

**Frozen Dreams and Delusions**  
**400 Years of Arctic Cartography**  
**International Map Collectors’ Symposium**  
 UAF Rasmuson Library • September 9-10  
 Registration is limited  
 For more information click here!  
 907.474.7224

## Connect With Us

- Facebook
- Twitter
- RSS
- Pinterest

## Submit Your News & Photos!

We’re always interested in what you’re seeing and hearing around the community. Send us your news tips and best photos.

[Submit here](#)

Science magazine), is the director of the institute. As part of the 50th anniversary celebration of that organization, Barnes challenged 24 current and former researchers to sum up their research in just 15 minutes of stage time.

Their lectures, executed rapid-fire in the spotless new auditorium of the Margaret Murie Building, were a lively combination of history, stories about getting caught in offices with disobedient dogs, and nice little news bites. Here are a few of the latter:

- Black spruce trees came into Alaska about 6,500 years ago, when it was cooler and wetter, said plant ecologist Roger Ruess. Wildfires followed the black spruce into the territory. Because Interior Alaska is changing as fast as any place on Earth, hardwoods are shouldering out black spruce.
- Kittiwakes, true “sea gulls” with handsome black wing tips, nest in large colonies in bluffs near the ocean. Every four to five years, often after cold springs, chick survival in colonies is zero, said ornithologist Ed Murphy, who studied the birds for years on the western Alaska coast.
- The acreage burned in western North America has doubled in the last 40 years, said ecologist Terry Chapin. If current warming continues, in 50 years Fairbanks will have a climate similar to Saskatoon. “UAF will have the highest predictable (climate) changes of any university,” he said.
- Wolf-control programs could lead to more coyotes eating lambs, said ecologist Laura Prugh. She studies coyote predation on Dall sheep and has found that when snowshoe hare numbers are up, so are coyotes, and more coyotes eat more lambs. Wolf control could cause “coyote release” (less wolves mean more coyotes, which wolves kill). She also pointed out the state of Alaska practices wolf control in an area larger than the state of Washington.
- Using a snippet of hair, nutritional ecologist Diane O'Brien, using stable-isotope analysis, can determine your approximate intake of sugar-sweetened drinks. Her methods are useful in the studies of what coastal Alaska Natives eat as they combine a traditional diet rich in foods from the ocean and store-bought foods that are almost never from Alaska.
- Now director of the UA Press, former “microbiologist in a world of microbiologists” Joan Braddock said one of her most satisfying moments was when U.S. Geological Survey workers used her prescription that enabled oil-eating microbes to clean up a fouled site in Barrow. “After two months of using our fertilizing and tilling recommendations, the contaminant was cleaned up.”
- After studying the largest tundra fire in recent memory — the 2007 Anaktuvuk River Fire — ecologist Donie Bret-Harte has found that the site is greening at a surprising clip. “The tundra’s clearly recovering much faster than we expected,” she said. “This fire is not the big disaster people thought it would be.”

*Since the late 1970s, the University of Alaska Fairbanks’ Geophysical Institute has provided this column free in cooperation with the UAF research community. Ned Rozell is a science writer for the Geophysical Institute.*

Discuss Print

## Calendar

September 2013

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

today's events
browse
submit

## Marketplace

**Gene DuVal Real**  
**Estab...**  
Fairbanks, AK  
907-452-4363

1
2
3
4
5
◀ ▶

6
7

**Find Local Businesses**

Search

[Popular Searches](#) | [Browse By Category](#)

### Homes And Real Estate

**FOR SALE**

1290 Bobbet Lane  
North Pole

\$30,000  
1.1421 Acres

[homes.newsminer.com](http://homes.newsminer.com)

### Special Sections

- [Back to School](#)
- [Hunting Guide](#)
- [Making Local Work](#)
- [2013 Readers Choice](#)
- [2013 Visitors Guide](#)
- [Summer Fun for Kids](#)
- [Building, Home and Garden](#)
- [Spring Arts & Entertainment](#)
- [Health and Wellness: A woman's guide to smart](#)