

Graduate Student Approaches to Community Engagement: The Northway Experience

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Community Engagement is Fostered by UAF's IGERT Programs

Marine Ecosystem
sustainability in the Arctic
and subarctic (MESAS)

Resilience and Adaptation
Program (RAP)



Community Based Participatory Research

- Local concerns and questions
- Local information (memories, observations)
- Local influence on design
- Maximize benefit to the community
- Minimize risk to the community

The Northway Village Council has endorsed the work and community members have done much to facilitate a successful study.

Northway, Alaska

— CDP —



Location of Northway, Alaska

Coordinates: 62°58'9"N 141°54'18"W

Country	United States
State	Alaska
Census Area	Southeast Fairbanks
Area	
- Total	20.9 sq mi (54.2 km ²)
- Land	19.2 sq mi (49.7 km ²)
- Water	1.8 sq mi (4.6 km ²)
Elevation	1,709 ft (521 m)
Population (2000)	
- Total	95
- Density	5.0/sq mi (1.9/km ²)
Time zone	Alaska (AKST) (UTC-9)
- Summer (DST)	AKDT (UTC-8)
Area code(s)	907
FIPS code	02-56220
GNIS feature ID	1407253

It is all about Relationships

- Being respectful
- Being patient
- Sharing
- Listening!



Food Security is a Health Issue for Rural Communities

- Diabetes
- Cancer
- Infection



Nutritional content of muskrat

Nutrition Facts
Serving Size 3 oz. (85g)

Amount per serving

Calories 199
Calories From Fat 90

	% Daily Value
Total Fat 10g	13%
Cholesterol 103mg	34%
Sodium 81mg	16%
Total Carbohydrate 0g	0%
Dietary Fiber 0g	0%
Protein 26g	51%
Vitamin A 0%	Vitamin C 10%
Calcium 4%	Iron 40%
Thiamin 6%	Riboflavin 47%
Niacin 41%	

* Percent Daily Values are based on a 2,000 calorie diet

This nutritional label taken from
<http://my.net-link.net/~vaneselk/muskrat/rec>

Taking Guidance from the Community Develops Trust

- Listening to concerns
- Sharing draft research plans
- Incorporating feedback in design
- Involving participants in plan implementation



Benefits to the Community

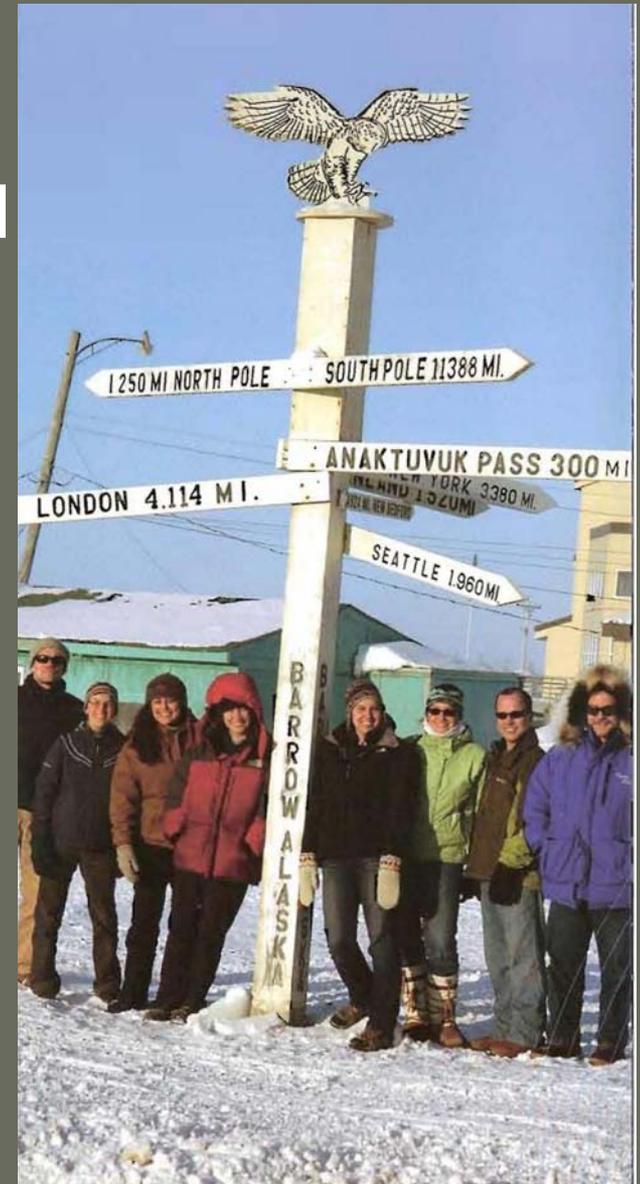
- Economic benefit
- Builds local research capacity
- Knowledge is passed on through the community



2007 Shaun Lunt

Benefits to the Graduate Student

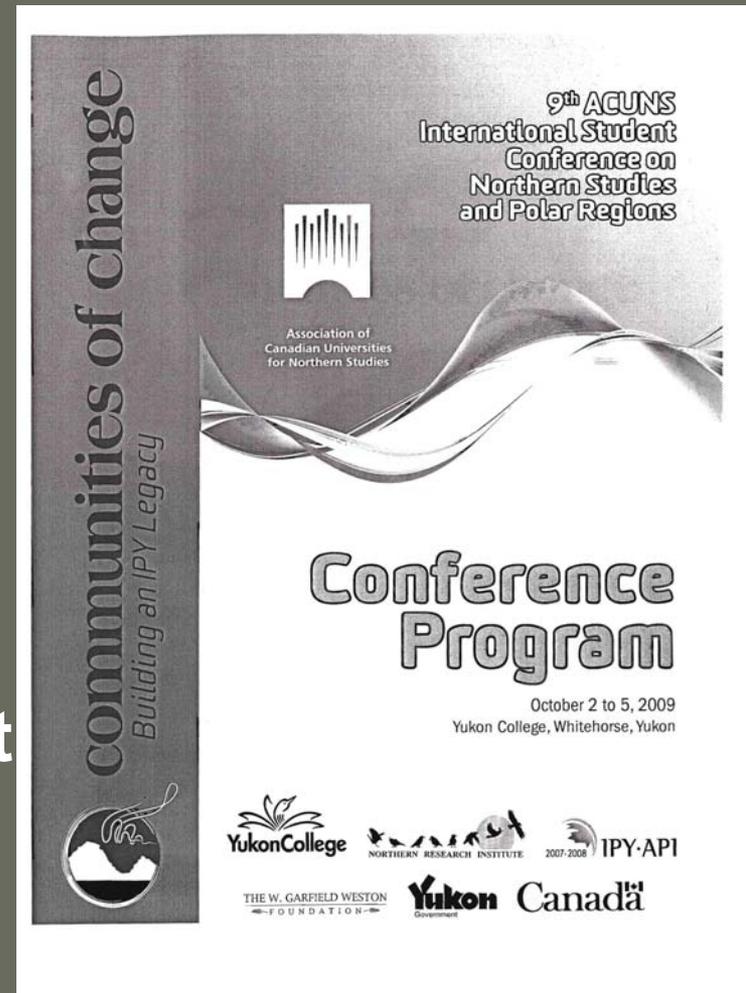
- Real world experience
- Extends student's network and creates a lifelong network
- Communication skills
- Broadens perspective
- Compares pragmatism to ideology
- Generates future research questions
- Brings a holistic approach to research



ACUNS *Communities of Change* Meeting

UAF Student Presentation Topics

- Rural health
- Food security
- Resource management
- Watershed stability



Who We Are is Where We Are

Challenges:

- Differing agendas
- National vs. local
- Different views in the community



More challenges

- Finding time (both participants and researcher)
- University risk averse bureaucracy
- Compliance (funding)
- Disciplines (threatened)



Funding helps the community

Salaries

Travel

Basic infrastructure

Research dissemination



Acknowledgements

Anna Godduhn, IGERT, Northway

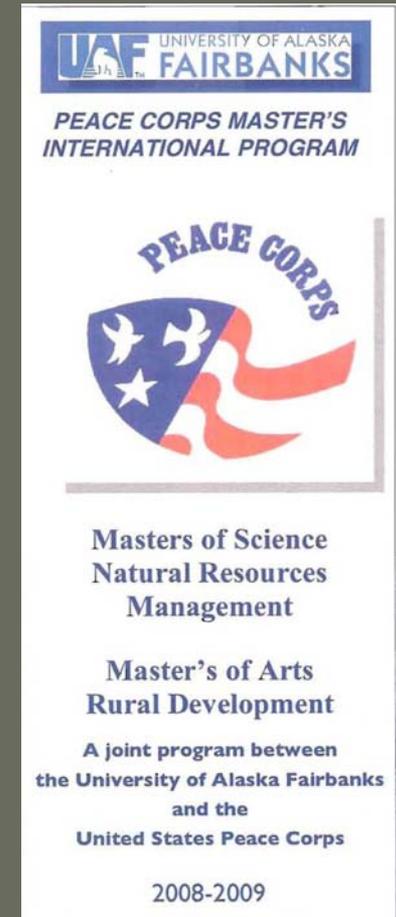
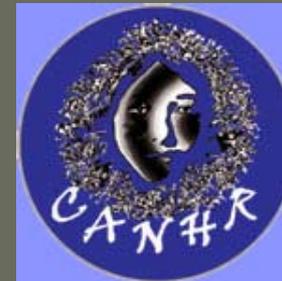
Sven Ebbesson, Norton Sound Health Corp.,
Northwest Alaska

Gerald Mohatt, CANHR, YK Delta

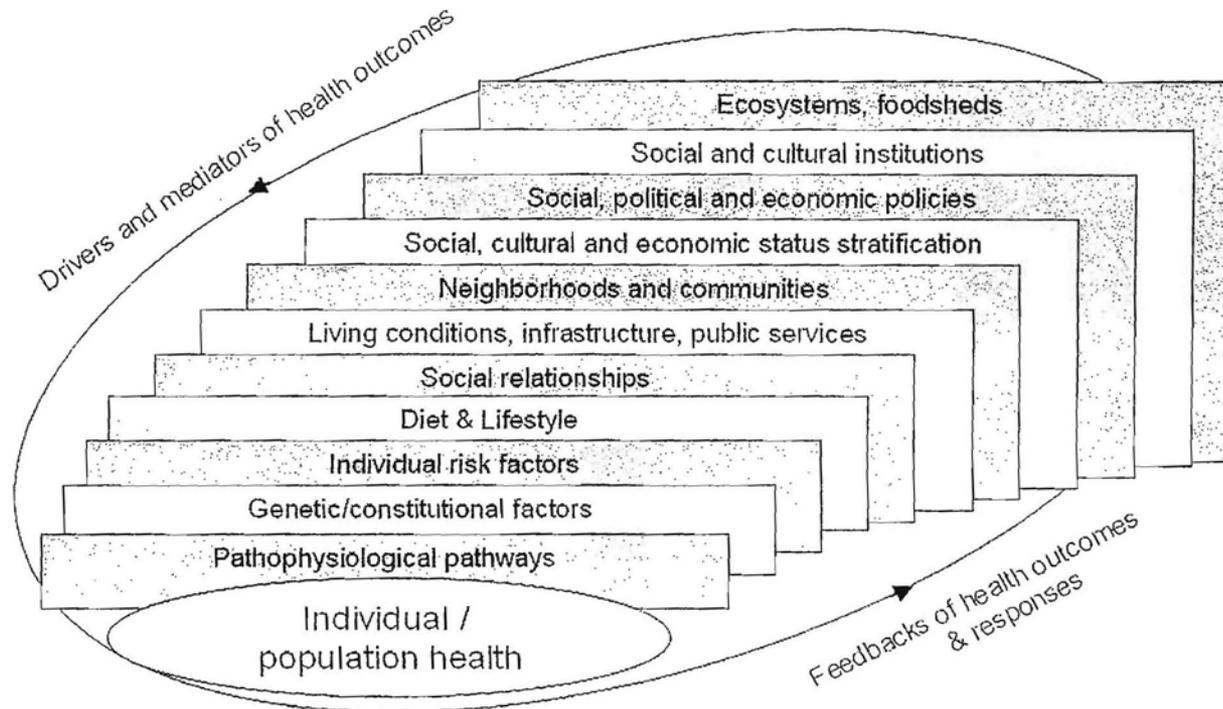
Jim Allen, CANHR, YK Delta

Craig Gerlach, RISA, Interior Alaska

Tony Gasbarro, U. S. Peace Corps,
International



An integrative health model



An Integrated Health Model. In general, conceptual models of health vary significantly in the extent to which they consider both biomedical and non-biomedical drivers of health (Boon et al. 2004). This figure represents a fully integrative (versus disciplinary) approach. How the environment influences individual and populational health begins with direct environmental influences, e.g., through food and other environmental exposure, but is mediated by a hierarchy of risk factors and influences on life course, from the very broad scale influences of one's ecosystems, social and economic circumstances, to more fine-scale determinants such as social relationships and living conditions. The health outcomes for the individual then feed back through the system, via health outcomes influencing the disposition of one's interaction with the community and environment. Figure from (Loring and Gerlach in press) adapted from (Kaplan 2004).

Change and uncertainty

What are the day-to-day and cumulative challenges we face?

Recent impacts

- Climate, weather, seasonality
- Extreme events, storms, fires
- Socio-economic forces
- Regulatory frameworks that conserve or constrain



Cumulative and synergistic effects

- Global climate change is “directional” but the impacts on regions are not so clear or straightforward
- Social and ecological change is unpredictable and difficult to plan for
- What is a driver or tipping point at one scale may be a feedback at another

Slide courtesy of Loring, et al.

Rural-urban vulnerabilities

Subsistence-country food

- Access to country foods is constrained by climate, weather, and regulatory frameworks

Food from rural and urban stores

- Inferior to country foods in many dimensions
- Food security vs. nutritional security
- Links local systems to global food system with risk and vulnerabilities



IMPORTANT PRODUCE ALERT

AC has pulled all fresh packaged spinach from the shelves due to an outbreak of E-Coli in several states. To date Alaska has had no reports of related illness.

Although AC sells Fresh Express bagged spinach which has not been named as having a problem, to assure the safety of our customers we have eliminated all brands until we are notified that all are safe.



California Freeze - January 2007

The Fruit and Vegetable growing Regions of California, Arizona, and parts of Mexico have been devastated by freezing weather and Heavy Frost Accumulation. California has been affected the most of these three regions for the last several nights; the citrus, berry, and major vegetable producing regions have been heavily damaged. AC has been notified to expect limited supplies from these regions for the following commodities: all California Citrus, Berries, Celery, Broccoli, all Squash, Cucumbers, Bell Peppers, all Lettuce (Head and Leaf), Green Onions, and Cauliflower. Bagged Salads are expected to be reduced in quantity or not available depending on the specific item. Some varieties may be discontinued until relief is available.

"We want to reassure our customers that they will continue to receive the best produce that is available on the Market, at a cost that will only reflect the changing markets."

Slide courtesy of Loring, et al.