Partnerships in Fisheries Technology: Building our leaders of tomorrow in fisheries and ocean sciences through collaboration between industry, management and academia

Ann Emmsley for J. Straley, Fisheries Technology Interim Program Director
University of Alaska Southeast Sitka Campus
State-wide entry level program for non traditional students in rural communities

Administration moves from Ketchikan to Sitka 1 July 2013
UAS Sitka Campus offers faculty support for teaching distance.

Sitka is a fisheries hub, with 3 hatcheries, including the only salmon training hatchery at the Sitka Sound Science Center (photo shows hatchery pens).
Statewide program serving regional & community needs in workforce development

- Articulation Agreements at other rural campuses
- In Place
- Projected
- UAF 4 year

Program will be more visible working with local industry to provide hands-on training
Two Tracts
Fish culture
Fisheries management

Fisheries Technology, A.A.S.
Associate of Applied Science
Ketchikan, Distance Delivery

The Associate of Applied Science provides students with a broad educational and practical foundation in the field of fisheries technology. Students will be prepared for entry level employment in federal and state agencies, hatcheries, and the private sector.

Degree Requirements
The A.A.S. in Fisheries Technology requires a minimum of sixty credit hours and a GPA of 2.5. Of the 60 credits, students must complete 20 credits at the 200 level or above. Students must earn 6 credit hours of internship.

Two year Associate degree and one year certificate programs

- Articulates with the one year certificate program
- Also articulates with UAF School of Fisheries.
- AAS graduates can readily move on to 4 year B.Sc.
- Courses distance delivered and workshop based
- Internships are a fundamental aspect of the program
Industry Partnerships

• Industry input is essential to stay on track and meet training needs
• More hands-on coursework recommended by industry
  • Water recirculation/reuse
  • Fish health/nutrition
  • Basic hatchery maintenance, small engines
  • Weir/fieldwork training
  • Asynchronous delivery professional development
Distance Delivery

• Video - enables live interaction between students and instructor
• Rural students have accessed courses with little difficulty in recent years
• Communication between instructor and student via email and phone – instructors highly accessible
• Allows non traditional students educational opportunities
Pros and Cons of Distance Delivery

Disadvantages:
- Lack of face to face hard for some students
- Dependence on technology
- Hands-on lab sessions not always possible

Advantages:
- Higher education available to remote sites
- Flexibility – just need access to the internet/can be travelling
- Class sessions are recorded to allow students access if missed
Key on-site workshop: Fish Culture Techniques Course

- Designed for both experienced and inexperienced fish culturists. Learn from one another.
- Use of local resources: fish processors, 3 hatcheries, state fisheries biologists, etc.
- Located at Sitka Sound Science Center
Stimulating interest at various grade levels

- Introduction to Fisheries Careers
- College career fairs
- Tech Prep at regional high schools
- Supporting elementary and secondary educators
- Scientists in the Schools
2012 Salmon Spawning Olympics!

Hands on activity for fifth grade
Teaching fish culture basics w/o any fish!

Goal is to learn to spawn salmon eggs to raise in hatchery

Broodstock = ballons different sexes and species

Simulates real process w/waders.

incubation

Spawning process
Where we are today........

• 20+ graduates are employed in some aspect of the fisheries industry or management

• 35 students currently enrolled in program from across AK

• Professional development for current workers in the fisheries field

• Outreach specialist in each community with articulation agreement will facilitate recruitment and advising

• Dedicated advisor for the Fish Tech program
Long term impacts..........

- Creation of a well-trained fisheries and aquaculture workforce
- Increased capacity for coastal Alaskan fisheries enterprises to persist and hire locally
- Ability of University of Alaska system to provide entry level college education to residents statewide
- Contact Jan Straley if questions
  - jmstraley@uas.alaska.edu
Thanks to our supporters!

- USDA NIFA ANNH program and Icicle Seafoods generously support the Fisheries Technology Program.
- Sitka Sound Science Center is a working partner. The SSSC facility is a great teaching platform.
- Local hatcheries and other agencies have provided current job information to students.
- Our students who enter the industry well-prepared!