

Trout Physiology Lab

Ken Rodnick "Muscle physiol, Adapt^{to}land Biol"

Field physiology + swim performance, ^{O₂} constant

- low temperature tolerant

Swim performance chamber -

portable machine ^{150 lbs} w/ generator ^{power}

- can test a dozen fish in a week

- they take it to Steens Mtn for

redband trout warm water

tolerance / physiology.

Use on cutthroat or salmon parr

@TR? Up to 8" fish in 3" dia

tube or 18" fish in 8" dia tube

Chris Jenkins, Grad Student

Rattlesnakes Jim Pease's relative

Interested in helping Chuck summer
2005 Field Ecology course. Then
stay & look at rattlesnake distribution
& relative to GIS ^{habitat} prediction.

Prairie vs Western Rattlesnake
subspecies interest with new sub-
species designation. Possible
post doc on Prairies that may
occur on BigCreek or both
subspecies present.

Predation Topic: with disturbance
habitat change \downarrow PreyBase \downarrow Lifelist
variables of snakes, (attho INEL #'s
dont Δ).

Mt Goat interest, too.

Marjorie Matocq ("matokë")

Woodrat rat research.

Small Mammals

Woodrat

- 2 subspecies in CA - 1 has ^{much more} ectoparasites
- Middens as historical record 40K years ago
- Plague - new or old introduction

(Our students could document locations of middens)

- A PhD student ^{Quinn} is interested in studying mating systems of Bushytailed Woodrats (Polygyny vs Promiscuous) - continuous popl. habitat and isolated sites.

NSF Long Term Res. In Envir Biol program

- need 5 yrs data already - pays for undergrads + a postdoc to oversee monitoring program

Hastings FS - use paying participants

for week long project (fox trapping)

Native Plant Society - give a talk 1st to promote

School Teachers - ISUE + Biol - designing curriculum

Rosenman
2 million
NSF grant

Ed Gallindo - Shoshone - Bannock Tribe
member ^{Spannack} HS teacher. Great to
work with. Undergrad mentor ^{at ISU} Bid
program NSF (Native Scholars
Program), Ed is the fundraiser
→ 238-4200
cell 251-3180
Mr EdG@aol.com

Pete Murphy - Amphibian Biologist
- Behavioral Ecology - Peru

Chytrid fungus attacks skin of
amphibians → dieoffs in SAm,
Australia, also Calif, Colorado,
Az.

Spadefoot toad tadpoles
Carnivores vs omnivores

Rosemary Smith "Behav. Ecol, Comm Ecol, Evol, ^{Biol Educ}
(husband Rick Williams "Molecular Pop Genetics,
Plant/Animal Interactions (pollination)")

→ her specialty is burying (carrion)
beetles. She had done most work
at Rocky Mtn Biol Sta. (Rick's)
Is interested in a closer research
site

Nancy Huntly
Comm & Evolutionary Ecol,
Plant-animal interactions, Biodiversity

Richard Inouye - Dept Chairman
" Plant & Comm Ecol, Plant-Animal Interact

Field Ecology Course - Spring Break

- Matt Germino teaches
- TRFS could be a site ^{Utah} otherwise
- 15 students

Plant related work - LT monitoring
nitrogen deposition - grasses

Water Quality & monitoring

EPSCOR - ^{Idaho} Water sampling - ^{element} ISU

microbiological analysis

(^{yes} TR could be a pristine comparative
site to Portneuf.)

3.60
437
1202

Fish Ecology Lab
Meridith, Sarah, Chris

One grad student doing radio
telemetry on Cutthroat in Salmon system

Heather & Andy
Heather works

Zach Liffon ^{Grd} Student (Paul Link)

Stream Geomorphology
related to bedrock ^(lithology) geology
affecting gradient Δ & valley
width & boulders.

(quartzite = big boulders/rapids and
Rush Cr Challis Volcanics = breakdown)

- Compare to models developed in
high precip Cascades.

Zach will be in early June thru July
see area & select sites - meas
gradient width, boulders,

Hyperspectral for ^{quartzite} boulder ID.

liftzach@isu.edu

Jeffrey Hill "vascular plant Morphol.
and Flower Dev."
Plants - Ferns specialty

Ferns as environmental indicators
since they can be haploid rather
than diploid, so express
mutations directly. Mosses
Club (Solenella)

Know
Any botanist who has done lots
of work in the area - knows
about plants? FS botanist? Brunsfeld

(Rice? Williams - Pollination Ecol
working on geraniums)

Collect ^{Ferns} late season for spores

hilljeff@isu.edu

↓ (August)
spores
underside of leaf.

More Funding Sources

Eisenhower Grants for teachers
Organization gets funding to pay for teachers.

Museum collections Grant -
state museum of natural history
plus reference collection @ TRFS

Graduate RAs - Wayne:

2 week commitment for class then
have student do 8 wks research since
already there

Combine faculty (1 ISU + 1 UI) so
could lead to future collaborations

A student could take data from
summer and continue data analysis

DAVE DELSHANTY - wants to take
a lead in multi-author grant.

This project he would like to coordinate

FS Education (Chuck - \$avail?)

Wayne - yes education is part of our grants

FS (Dave) - maybe emphasize Wilderness & T&E monitoring

FS (Chuck) - bring in FS people to participate (Kingsbury, Thurow, Ferout, ...).

Grant Writing (REU Site)

Dave lead interest. Holly, Janet R & Jeff Braatne likely interest too, H & J we want to be involved, but fine not the lead.

* We need schedule (on web)
so everyone knows who's at
TR when.

* Get Marjorie in this summer

Add the geology people: Paul Link,
Zack, Nancy Glenn; New
geomorphologist - good
interest in working in C. Idaho;
has worked on Payette - her interests
are landslides & fire.

Holly & Janet R - ~~FB~~ ML Grant - get copy
of successful proposal or Univ so can
model after

Meet @ TR Aug/Sept for Grant

- ① Outline & assign
- ② Meet @ TR several days
to write out basis of grant
together
- ③ Dave D. + Jeff B. (+ Janet) lead
Marjorie will help w/ biological
collections grant & asst w/ other.

NSF

for grant success

REU site Grant Appl.

- Ernest - Need connections w/Tribes or ^{underprivileged} students
- ↳ (Ed Gallindo Shoshone Bannock
- TR cultural resources
- Sheepeater Indians & Nat. History

TR Grant Meeting 11-15th Aug

[ISU] Chuck ^{Amphib}, Wayne ^{Water}, Dave ^{Birds},
 Marjorie ^{Mamm}, Ernest ^{Fish},
 Rosemary ^{Insect} (?)

[UI] Janet R. - Jeff ^{Riparian} B - Katy K. ^{Fire}
 John M? - (Karen L?) - Jim P
 - (George ?) - (John Byers)

Chuck & Dave & H & J

TAYLOR RANCH PROGRAMS

- 302 class - no WI registrants
- Standard summer course doesn't work
- New Model based on our Internship
 - Monitoring
 - Pay students
 - Weekly Faculty involvement

2nd Meeting ^{H & J} Chuck, Dave, Wayne ^{Marjorie Ernest}

Chuck Fund as Educational Program - EPA

Costs:

10 Students \$5,000 / student
 Wage 25,000 (\$2500 each)
 travel \$2000
 lodging 70 x \$15 =

5 P.I. + Grad student asst. \$22,500

5,000 flight \$500 + food lodging ~\$500
 Grad Stud.

\$17,500 2 weeks Salary \$2500 + \$1,000

Funding Sources

IDFG Wildlife Grants

(Monitoring Program & Education)

USFS - Amphibian monitoring \$10K

REU site (NSF) (Ernest &

Marjorie ^{have} work on similar)

NSF Course curriculum development Program (Rosemary) is doing

"money for the taking" says Marjorie

(Rosemary assesses program success)

Add a few high school teachers for one module

Day:

Overhead from Grant go back to TR?

Potential for a student to turn into

Tools -

GPS, remote sensing,

GIS, Internet access

access aspect

Focus this year)

text

inverts

ISU-UI 3+2 people (+1 for dinner)

Mon L 1/2 size lunch? hand rolls

D German sausages, ~~drinks~~ + ~~sauerk~~

Applesauce cartons Choc.

Tues B (camp) oranges; inst oatmeal coffee

L bagels cheese sticks
~~sandwiches~~, carrots, cookies apples

gorp, granola bars

Fruit juice D BBQ: chix + ^{2lb} potato salad +

^{1 sm bag} froz corn, dessert (cake?)
pie

Wed B ~~Pancake mix + blueberries~~
Pancake mix

~~grapes~~ bananas, grapes

L sandwiches et. al

D Spag + FR Bread + ^{green} salad +

can gr beans (froz Dessert)

Th B ^{Apple} Dutch Baby + coffee + melon?

