

Ideas developed by Jim & Holly

Ecological Monitoring

(honorarium)

Baseline: sm. mammal bone
 bird stuffed plants
 maps - veg, topog, habitat, geol, trails, terrain, soils
 aerial photos / satellite imagery - GIS
 plant communities
 Lists of bird, mam, herp occur - abundance, res, breed, mig, time yr
 List - largest trees / oldest trees.

largest / oldest trees
 fishery stream class ^{riffle, pool, run}
 Lakes - depth, size
 month → Cr. or Creek

Mammals

F. N. Am W. Sheep
R. M. Elk Fdn.
F&G
FWS

date behav. obs. Age profiles
 (hab, loc, comp #)
 Big game (DES) - sitings, copy of elk green up count, post hunt season?, sheep migration, sheep lambing, parasites, fecal food analysis, rumen samples from dead, kill reports, mineral licks
 necropsies, <Goats?> Predators - dens, sightings, radioloc, pond
 Wolf - habitat & transplant Bobcat/rac index stakes (compare w actual #)

Small Mammal - trapping areas

Other / Non game - sightings - TR elsewhere <skunks> <coyotes> <craccoons, beaver, otter, rabbits, marmots / ground squirrels, pika, skunks, badger, <wolverine>, Marten - mink - fisher, flying sq.

Birds

- dens, food habits, necropsy & parasites, butonic, giardia
 Bean can's w sardine cans 20 mile route every 5-7 days during breed season - Aug.

Migratory - sitings, dates

Winter - magpies eagles dippers

Summer - riparian, forest, canyon

MS

Game birds - Grouse, chuckar - sitings, brood size range / overlap

Birds of Prey - nest sites, sitings

Blue Bird Soc.

Cavity nesters - WP, owls, bluebirds

(honorarium?)

Censuses - cabm cr spring, riparian, high elev forest

(Whiskey Springs?), lower Big Cr Canyon

Nests

List of species occurrence - time yr, mig, res, breed

Fisheries / Aquatic

Stream water quality - temp, sedimentation, algae?, leaf drop, nutrients?

Anadromous - survey for redds annually, sightings, loc. of redds, stream characteristics
F&G counts.

stream
Cutthroat - sightings, log catches - size/date, cutthroat-rainbow
cross migration food habits
MS?

MS.
on ecosystems
Lakes - fishing log - size, sp, spawning
Sample lakes each year, F&G stocking data, eutrophication, herpetology - frog salamanders..., water quality, degradation, riparian inventory, water dependent animals - shrew..
human

Aquatic insects & limnology

Non game fish - Whitefish - winter schools MFK.

Suckers? Squawfish?

Fish food sources - artificial fly success, hatches, periwinkles, larvae, grasshoppers, stomach content analysis

Molluscs - fresh water mussels - locations, bed size shell size, ...

Weather station - AT TAYLOR

temp, precip., snowfall

Other Research in RNRW - FS, F&G, FWS, Universities,

F&G

Holubets
Salmon F&G

Dept Health
FS

Park Service & EPA?
acid rain

Micro Bubonic plague

F&G Parasites & intermediate stages <lungworm>

FS - H&J Giardia inventory

Insects - honeybees, "pests", grasshoppers, hatches - nymphs ^{Nutrient/mineral cycling} ^{aquatic}

Plants

Stockcheck-Forestry Plant comm. & plt survey (plts indicating strange habitats - Fred J.)

MS Burns - document natural annual succession, FS data too

Phenology

Big game winter range - graze/browse

F.S. Overgrazing - Cabin Cr. / wet meadows?

(honorarium) FS Monitor sites: riparian, wet meadow, lakeshore, dry

grasslands <graze> - disturbed vs undisturbed

Plant diseases - smut, mistletoe, root rots, bark beetle, budworm ^{Forest entomology insects}

(honorarium?) Coastal disjuncts - mapped ^{range}

Variety overlaps & plt ranges recorded

Sensitive species - inventory for and monitor

Tree growth - rings?

(honorarium MS) Vegetation plots - annual measurements - % comp, # plts, biomass ^{sp.}

FS Invader species - Knapweed

Fungi, lower level plants, microchiza

Mike Falter

Water

Water quality - O₂, minerals, turbidity, chemicals - mines, parasites/disease, algae, sedimentation ^{& sediment loads}, pH, temp

Stream char - depth, flow, width, speed, ice char - thickness, time w/ice, temp., particles - leaves falling ^{CFS}

Erosion of soils/deposition

Springs - flow & time of year, temp, water qual, algae

Don Johnson
class?
(honorarium)

Herps

Rattlesnakes - range, sightings, subspecies?

Snake inventory

Lizzards

Turtles? Toads Frogs Salamanders

Geology

baseline

Hot spots - winter: snow depth differences, plant comp.
size, location etc

Soils - erosion rates ^{stream, bank deposition & aging} natural & disturbed sites

soil types and mineral comp

mineral licks - chem. comp.

recreation / disturbance - compaction, erosion, %
bare soil

Caves - use, ^{animal} location, veg., size, access.

Glaciation, landforms - lake formation.

Human

Camp site use - historical → present

Hunters

Rafters

Campsite impact

Ecological Monitoring

Agency Contacts - funding, assistance expertise

- F USFS Dist, Forest, Region, Wilderness spec
- F IF&G Region, State Off, Dir. Research, Nongame Biol ^{Holubetz}
- F EPA (Lakes/acid rain / hair samples-heavy metals) ^{OSU?}
- F I. Health Dept (water q. /disease)
- F? I. Mining Assoc? - Boise Off
- F F. N Amer Wild Sheep - Res Dept
- F RM Elk Fdn - Res. Dept
- F FWS - Fed, state office (endangered, wolf)
- Audubon Soc?
- F Blue Bird Soc.
- T Wildlife Society -
- Fisheries AFISoc
- range
- World Biosphere Res. - N. Parks G. Wright
- F Stillinger Fund
- forestry
- botany
- Nature Conservancy
- Id. Natural Heritage Prog.
- endangered plants
- hydrology
- soils SCS?
- N Parks?
- World Wide Monitoring Network[?] assoc w/ NPKs
- Dept Agric. - honeybee, grasshop
- I. Outfitters & Guides Assoc.
- Boy Scouts?
- N. Weather Service