



**Meeting:** Northeast PARC Meeting

**Date:** October 13-15, 2000

**Location:** Patuxent Wildlife Research Center - Laurel, MD

## **Proceedings**

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### **Friday, October 13, 2000**

**1:00 pm Meeting was promptly convened by Linda Weir**

**Welcoming Address--*Marshall Howe, USGS Patuxent Wildlife Research Center (PWRC)***

Excited about the prospects for Partners in Amphibian and Reptile Conservation, given his perspective from working with Partners in Flight. Welcome and history of PWRC. Mission to study how humans impact wildlife (versus prior focus on how wildlife impacted people). Brief history of work with contaminants (Rachel Carson did work here on site). PWRC has survived many affiliation changes, now USGS & USFWS. Focus on monitoring and research. Offers on-line databases of breeding bird surveys, etc. History largely associated with bird research. However, there has been some herpetological focus. Lucille Stickle, former director, renowned for box turtle population studies, longest ongoing box turtle survey anywhere. Bruce Babbitt's developing interest in amphibians has established an amphibian monitoring program. Sam Droege established NAAMP, now run by Linda Weir. Hope to run a peer review of that program soon. Also, there is FrogWatch (Department of the Interior program) run by Gideon Lachman. Robin Jung, leading the ARMI program, developing amphibian monitoring programs on Department of the Interior lands. Glad to host this particular group.

Linda Weir introduces the planning committee: Robin Jung, Scott Smith, MD Dept. of Natural Resources, and the late Laura Mazanti.

Billy Teels, USDA Wetlands Science Institute, dedicates this meeting to Dr. Laura Mazanti, of the planning committee, who passed away in the planning of this meeting this summer. Had been a PhD student at the University of Maryland. Had enjoyed meeting people in this organization, and looked forward to working with the field perspective of herpetology and wetlands. Related an anecdote: Had been involved in inventorying for the domestic policy task force, looking at saturated wetlands in Georgia. The head of the task force was along, and commented that she didn't believe these particular areas were wetlands, which prompted a reproach from Laura regarding the potential drowning of this individual in the purported wetland.

#### **(a) Meeting Overview and Introductions, Scott Smith**

- Contents of folders provided--agenda, list of participants, map of facility, list of local restaurants.
- 3<sup>rd</sup> NE PARC meeting. Sept. in NJ, March in NY. Eric Stiles brought PARC background materials, now posted around the room.

- Working strategy of PARC accepted by the NE working group in September. Original five were Eric Stiles, Al Breisch, Stafford Madison, Chris Rather, Allison Haskel. 3 National Representatives, Stafford, Allison, and Eric.
- Agenda to focus on and develop action items on the key issues highlighted at other meetings. Please be interactive. Ran through the agenda for the weekend. Individuals introduced themselves around the room.

## **Highlights of spring NEPARC meeting, held at Mohonk Preserve, March, 2000--Al Breisch**

- Two-day, mid-week meeting... did that style meeting attract a different group of participants than this weekend style? Missed herp clubs, students.
- 40 participants, from state and federal agencies, NGSs and consultants. Perception that the past meeting was exclusive of other organizations... try to put that to rest.
- Accomplishments--communications (web site, list serve)... how can the web site be used more effectively (links, etc.). Comments that the web site is evolving, should perhaps make use of search engines. Link herp atlasng groups in different states to NE PARC website.
- Reminder that this group should feed and report back to National PARC... update from prior meeting, and will be an update today. Eric and Alison.
- Model Herp Regulations. Try to avoid loopholes.
- State list of herps. Project completed, now on website, following the NY meeting. List of species and status, (endemic, extirpated, introduced, etc.). Should protective status be added (decided at that meeting not to add that). Should start assigning tasks associated with each of those species.
- Vulnerability of herps, related topic. Our list may or may not exacerbate that problem.
- Directory of herpetologists. Suzie (?) had brought forms to fill out in order to establish the directory, which was one of the action items from the last meeting. Questions now as to how to make this directory available... website, or print copy to each individual included. Can voluntarily include yourself... data will be compiled today. Midwest PARC has an on-line registry, with voluntary inclusion.
- Robin compiled spring meeting notes.
- List of Potentially Affected Individuals (PAIs) who could not attend the meeting, but might be touched by action items established. Nothing further to report, will not be touched on today. List may be circulated today... keep it in mind.
- Education projects, will be covered by Stafford.
- Model Regulations, including pet trade.
- NE Species List (completed)
- Talked about a bibliography... is it better just to connect to those already established on the web, etc.

### **(b) Eric Stiles, National PARC Update**

- Report from the Atlanta meeting. Noted more diversity than at the initial meeting... diversity of fields represented.
- National meeting minutes will be on the website: [www.parcplace.org](http://www.parcplace.org).
- NFWF instrumental in creation of PARC... good connection to have, as there are many funding opportunities (Whit Gibbons). Looking for specific projects that need funding. Is there a deadline? (No, will be discussed later). They will try to find funding if we provide a detailed pre-proposal.

- Need to assert our regional priorities. But do so in a manner that is specific, that the National Steering Committee can work with.
- Emphasized: PARC is not a lobbying organization.
- Listed separate working groups, by topic, as well as region. Work to establish SW and NW. Try to foster communication between organizations, so as not to duplicate efforts. Laura Herbeck? Of Midwest working group, in contact about priorities of her working group. MW has subcommittees by topic.
- International symposium in La Paz. Notes will be on the PARC website. (website through Savannah River Ecology Lab, in need of a new Webmaster)
- Monitoring: Erin Moose? Looking for funds to establish database in conjunction with ARMI, on DOI lands. Summarize all A&R inventoring and monitoring efforts on those facilities.
- Bruce Tower? Policy trade and regulation group: communicate with biological supply houses. Success with Carolina Biological in terms of giving teachers info with their frogs. NE working group cited for doing a good job in these respects! Draft sustainable use document; Committee on captive breeding.
- Management committee, will speak later, Kirk ?
- Stafford will update on Education.

## NE PARC Structure

1. How it's happening now
2. Future thoughts.

- . Structure provides institutional memory, and gets around the problem of high turnover. Important for consistency. Establishes a point of contact, for interested individuals and to foster communication. Communication, for example list serve and web sites. Structure also assists with accomplishing action items. Also provides a record of activities and action plans.
- . Current structure, is anarchy?! No one was responsible to check in with the people who took on the action committee tasks. (Stafford). Currently have rotating hosts for meetings. People are volunteering for formal functions. Chris from RI, Alison Haskell (great moderator), Scott Smith volunteering for many tasks, Al Breisch and staff. There is a large amount happening without a formalized process, which might help the process of continuation. Linda, Gideon, and Robin...lots of work, hope to not have things fall through the cracks. Think of ideas for structure.
- No formal structure.
- Minimalist structure (co-chairs, co-facilitators, points of contact)
- Sub-committees within the regional working group, around issues or topics, short or long-term, action-oriented. (seems to get bogged down) Chris from SE working group, potential to alienate with the top-down approach... favors a grassroots approach. PIF experience seems too top-down, too much of a structure... started in a similar manner as PARC (many seconded this opinion)... how do we avoid this? Glen Faris(?) very involved in PIF.
- We will be focusing on these choices tomorrow... Linda's writing down the ideas, please type-up flip-chart info and distribute.
- Other ideas:
- Middle ground, generate ideas from the regional meetings, to establish issue-oriented groups to tackle action plans and report back to the whole group (Stafford)
- Has to be accountability when action items are established. A structure-less organization isn't accountable. Structure must reflect the diversity of the mission of organization. (scott Smith)

- Without organization, anyone could speak for PARC, without the organization's consent (Al B.)
- Benevolent dictator? Can establish a team feeling, and the trust is necessary (Alan Salzburg) Team, trust, established by one leader.
- PIF (Sam Droege) faced the same difficulty of having no monies associated with the organization. People started dropping out when there was no backing for the projects, and no progress made. We should make an effort to fund projects, find priorities. Develop a relationship with NFWF to make this happen and direct funds.
- PIF model of choosing project priorities to present for funding. Organizational backing.
- Action plans vs. regional priorities. (National interest vs. regional projects)...did PIF have a list of funding sources?
- Suggest that NE PARC not get caught in the trap of chasing money (Glen ?). Try to use the resources associated with the organizations.
- PARC can help to highlight to all organizations the priorities in the field.
- PIF had salaried, full-time, national and regional coordinators. Once the infrastructure was in place, the first few years were a planning effort, and then moved to an implementation phase (where more money will be required... just beginning that now).
- Advantage of temporary anarchy: (Glen) lots of energy in the individuals of this group... structure provides an excuse to defer to those in charge.
- Greatest resource is the collective wisdom in the room...don't unwisely expend our energies. Be sure to speak as a body, no matter how we're organized. There's no over-arching regulations with herps like there are with migratory birds, and so we may not need the same type of structure as PIF). (Charles ?)
- Have the objectives in mind as a group... structure is necessary to maintain organizational focus, even if the structure is minimal. (military herp model)
- Advisors for the next meeting, etc. (not rigid, not glamorous or titled, but definitely structure)

### **What roles require continuity in an organization?**

1. Communication (external, speaking beyond the organization to the community, etc.)
2. Internal communication (within the small group and to the larger group)
3. Participation of group members, taskmaster/cheerleader
4. Accountability
5. Time-keeper
6. Coaches
7. Feedback

What can we do to encourage people to want to contribute to this organization? We can't make people do what they don't want to do, but what can we do to help and support people who want to take on tasks?

Decide on our priorities and areas of expertise, as well as personal interest, and establish those areas so that people can be targeted for appropriate participation.

### **Everyone tonight should think of:**

1. Structure possibilities
2. Roles that are require for continuity

We should leave here this weekend with some sort of structure, so that things don't fall through the cracks.

We can talk about what we need, and then perhaps how to accomplish that.

### **3:00 pm- Break**

### **Friday, October 13, 2000 (continued)**

#### **3:20 pm-- Land Conservation Opportunities for Herps: Glenn Therres (moderator)**

1. Scales, site specifics, site selection
2. How to use biology use to convince general population
3. Blend of NGO and Government groups in discussion

#### **3:25pm-- Charles Rewa, NRCS, Stationed at PWRC**

- **NRCS Habitat program**, USDA Natural Resource Conservation Service
- Habitat is key, private lands is key to all wildlife conservation 70% is privately owned, NRCS has history of working with Land owners to conserve land for wildlife
- Conservation programs to Farm Bill: billions of dollars given out to projects to conserve land
- History, 1930's Annual cropland adjustment (no cover required-limiting crops to regulate pricing)
- 1950's to 60's Annual set-aside continues, Multi-year set asides intro- Soil Bank
- 1970's Increased production and clean farming
- 1985: Conservation cover Long term set asides
- 1990: Permanent easements of land conservation site
- Wildlife emphasis

(c)

#### **(d) Conservation Reserve Program**

- 10-15 yr contracts of voluntary enrollment- good for pheasants and other
- Up to 36.4 million acres enrolled!
- Established permanent land sets
- Mostly Great Plains-Midwest
- Continuous sign-up CRP provides add incentives for filter strips, riparian buffers, grassed waterways, field windbreaks, shelterbelts and living snow fences
- Big signing incentives

#### **(e) Conservation Reserve Enhancement program**

MD, VA, PA, OH have programs

#### **Wetlands Reserve program:**

1. Restored 975,000 acres of wetlands nationwide- primarily on cropland
2. Permanent 30 yr easement or 10 year cost agreements
3. Mostly lower Mississippi valley

4. Mostly permanent easements
5. WRP reforestation efforts
6. Tree planting
7. Hydrology (dikes, water control)
8. Surface features diverse micro-topography (diversity)
9. Complexes being established
10. Wildlife Habitat Incentives program
11. Northeast, broad and successful, flexible
12. 10 yr program where money is given to help restore lands for wildlife
13. In-stream work restore aquatic fish habitats
14. Lot's of partnerships in this program
15. \$50 million authorized in 96 farm bill
16. FY 98 \$30 million, FY99 \$20 mill....no more money in FY 2000!
17. Disaster appropriations bill (perhaps up to \$40 million for whip)
18. Types of projects: Aquatic, Riparian, Wetland, Upland
19. Environmental quality and incentives program
20. Provides up to 75%: 10 to 15 yr contracts

KEY TO ALL PROGRAMS is partnerships!!!

### 1) Q and A

**Q.** Any way of getting list of programs?

**A.** YES, [www.nrcs.usda.gov](http://www.nrcs.usda.gov) links to all the different programs

**Q.** Is there a minimum acreage?

**A.** No, there is only a funding cap

### **Kurt Bulmann, Conservation International: Coordinator for Amphibian and Chelonian Conservation in worlds "hot spots"**

*(two part presentation: International projects as well as a database)*

#### **1) Conservation International Projects**

- Support for amphibian
- Work w/ DAPTF and CI/ CABS
- Global red list
- Develop ways to work with development assessment of amphibian classification
- Build network, experts for collaboration Goals for global amphibian specialist group
- Designing effective and realistic landscape strategies for protecting amphibians
- Northeast studies and applying w/ other parts of world
- Turtles: do hotspots of turtles overlay with hotspots for other animals? Why?
- Asian turtle trade Loss of 1/3 of world turtle pop; b/c of
- Asian turtle consumption
- Over 60% listed endangered in Asian regions
- Other conservation programs Assurance colonies; facilities to maintain populations of endangered species
- To return to populations once trade issue to figured out

- Zoos, aquarium, private hobbyist, turtle pet traders, research institutes, old fish hatcheries to keep in contact with
- Actively building donor pool nowadays...to pull everyone together

## 2) **Goals/ Database/guidelines**

- ❖ Database, list of all herp management for research and literature
- ❖ Plan workshop to compile habitat conservation guidelines
- ❖ Users of database: land managers and NR resource managers, workshop participants, conservation and research ecologist
- ❖ Guidelines: common species common, stem decline of imperiled species, guide restoration of herps, reduce probability of adding new species to endangered list
- ❖ Habitat conservation guidelines: develop for each of 5 regions, interesting, best science data
- ❖ Management strategies: Protection, enhancement, alteration...etc.

## 2) **Q and A**

**Q.** Is literature available in electronic?

**A.** Yes, main national park website.

### **Ann Berry Somers: Project Bog Turtle**

Introduces document on restoration of habitats, specifically focusing on the bog turtle (initiative of NC Herpetological Association)

PBT Dennis Herman, Tom Thorp, Ann Berry Somers, also tied in with other orgs (mostly private sponsors, some DNR)

#### 1) Bog turtle: small, rare, and secretive

- Northern: threatened and Southern is also threatened due to similarity in appearance
- Protection of species and education selection: probing, trapping Site monitoring, vegetation monitoring, rare plants, monitor hydrology (ditching problem), changes in land use
- Population monitoring: noting new recruits, range, turtle migration
- Habitat Management: pre-existing condition, traps, radio telemetry, monitor hydrology
- Seasonal exclusions to learn about populations, reproductive biology (adverse effects, if no cattle in experimental data then increase in channelization)
- PIT-tagging: FWS Asked for help to pit-tag 33 test turtles (to test results), no noticeable scars

#### 2) Education

- Land owners (packages and info packs)- time consuming
- Children involvement
- Teachers

#### 3) Habitat protection

- Lease agreements (agreement not to alter wetland and allows researchers to come in do research on land) Good b/c PBT is not an NGO
- Purchases and easement

4) Consult w/ federal and state agency

- Educational workshops and Dept of transportation

### 3) Q and A

**Q.** Source of funding for lease agreements?

**A.** US FWS

**Q.** Any resistance?

**A.** Some owners will not let on land, need to just move on....

**4:40pm-- John Bender (MD TNC director of protection) and Janet McKegg (MD DNR)**

Crescent preserve project (partnership of NGO and government)

1. Near Delaware border of E. MDDNR and TNC lands for project (Baltimore corner, persimmon preserve, Jackson land, etc)
2. Why chose this area? (Janet McKegg): Delmarva Bay areas has lots of rare spp, sites, 13 have globally rare plants- very important sites, at start of research targeted woody areas, wetlands, for protection span of at least 3 mi. 1200 acres total

Threats to Delmarva Bays:

- 1) water quality and quantity
- 2) habitat fragmentation
- 3) Woody succession and timber harvesting
- 4) Residential development and road building (increased road kills)
- 5) Non-native species

Protection tools (John Bender)

- 1) Ownerships of conservation organization
- 2) Conservation Easements
- 3) Registry Agreement
- 4) Conservation Ownerships: other ways to ownership (when all the purchased land is not usable): working w/ neighboring land owners that owns 50% of prime wetlands, so can swap land areas, plus additional money, and a 3 year lease of property.

Conservation Easment

- Tax benefits (very attractive to land owners)
- Permanent restriction on the land
- Enforcement of easements



- Monitoring and enforcing restrictions
- Agricultural easements: 5 yr agri districts and can convert to easements
- Natural Areas Registry Program
- Hand shake agreement
- Low-pressure idea: good for land owners
- Low cost

#### 4) Q and A

**Q.** Farmland restoration and easement, some of the land talked about it good...

**A.** Yes, some are registered with Federal wetland restoration, others are private easement program

**Q.** Tax benefits?

**A.** Tax deduction for making donation; 15 yr property tax credit (after 15 yrs assess at the lowest rate)

#### 5:05pm-- Larry Niles, NJ FG&W, N State Programs

##### (f) *Herptiles projects: Buy land and Planning and implementations*

#### NJ Herptile Atlas

- Trained volunteers, increased accuracy
- GPS units, better measurements
- Citizen scientist
- Online data reporting
- Cost effective
- Good for public advocacy w/ public awareness

#### Bog Turtle Conservation

- vegetation control (purple loosestrife, phragmites and reed canary grass, and wood spp)
- GIS mapping of critical areas for Bog Turtles
- Maps guide long-term protection
- Work w/ private land owners (WHIP, free fencing....etc)

#### Vernal Pool Conservation

- Locate and map vernal pools
- Survey pools for herps
- Long-term protections

#### Timber Rattlesnake Conservation

- two distinct pop (highland-telemetric study for habitat, pinelands- telemetry to study hibernacula/den sites)
- need for landscape-level protection (Rattle snake den found in a development site- organizations are now suing Pinelands commission)

### **(g) Landscape level Projects**

- Historically, spp level protection only—now trying to promote landscape level projects
- Instead of starting w/ spp distribution started with habitat distributions, and overlaid spp data and developed a ranking for management
- Peer review group w/ Rutgers University
- Patches established and ranked depending on endangered, threatened, and suitable habitat but no animals.
- Estuary programs, EPA, private conservation groups, service provided by State is to provide legal aspects to complement the efforts of these groups
- Landstat is able to show us the degree and level of development and habitat fragmentation

### **(h) Herptiles as Indicators**

- Indicators have been successfully introduced into states management and assessment
- EPA lead system- goal to link programmatic funding to indicators
- Also trying to change mindset of ppl that wildlife is only for recreation

### **(i) Role of States**

- Not just flashy projects
- Need total system and infrastructure that exist in federal agency and state agencies...not just isolated research.
- Need to improve these systems as well and take advantage of these already established systems and integrating them into protection

### **5:35pm-- List of possible action items for conservation**

1. List of Grey Literature to Kurt Bulmann/National PARC
2. Identify people to represent NE in future workshops (NGOs, ppl who have developed and implemented mngmt guidelines previously, State reps, private land owners, industry/real estates/builders, ppl who provide technical assistance-extension agencies, herpetologist/researchers)
3. Increased distribution of current published literature (funding to promote this)
4. Strong-arm TNC to include areas for herps conservation
5. Creating network of ppl who are working on similar projects (unpublished research)
6. Identification of private land owners to help with easements before they pass away (this way do not have to deal with the children, etc)

Robin Jung: is it better to take monitoring and research money given to buy land now? Action now before science? Discussion. Buy Selectively.

### **6:00 pm Meeting adjourns for the day**

# Saturday, October 14, 2000 (AM)

8:36am-- Meeting convened by Linda Weir

8:40-- Linda Weir: North American Amphibian Monitoring Program (NAAMP) overview

## NAAMP

### A) Creation

Ideas discussed 1994  
Protocols developed 1996

### B) Partnerships

State agencies  
Academic  
Non-profit

### C) NAAMP Mission

Population trends  
At multiple scales (state, substrate, regional, physiographic)  
How? Unified Protocols  
Distribution of maps, education, etc

### D) History

Varied protocol, not good to see on higher scales  
Met in 2000 Regional Coordinators to establish Unified Protocol  
29 states that are NAAMP Active  
Presently only 25/29 original states that have accepted UP

### E) Unified Protocols (UP)

Surveys 3x a year  
Routes are random stratified  
Each routes 10 stops, listen for 5 minutes  
Dates vary regionally  
Survey begin 30 min after sunset or later (must be done by 1am)  
Use Original WI Calling Amphibian Calling Index  
Beauford wind codes  
Sky codes  
Date, time, observer, wind, sky, air temp, ambient noise, weather, spp, temperature  
Some states can collect more data geared to own state

### F) Internet Accessible Database

Regional Database  
National Database  
Volunteer Database  
Data available to all interested parties  
Regional Coordinator will be able to manage their volunteers

### G) NAAMP Future

NEPARC Meeting 2000

Need research methodology

Recruit other states and provincial partners (possible states to get involved is from ND/SD area and east)

Prepare for peer review process

## **Q & A**

**Q.** Any Salamander research?

**A.** Calling survey presentation, salamanders don't call

**Q.** How can compare data collected that do not follow Unified Protocol

**A.** Need to follow unified protocol, minutes, driving (as opposed to walking) to be able to compare, need to go during ideal time as opposed to set time

## **8:55 am-- Joe Mitchell (University of Richmond) Dept of Defense Lands Inventory**

Why study herps on Military bases?

- Train troops to do military stuff
- Sikes Act → integrated Natural Resource Management Plan required, but no research and info
- Therefore, lots of opportunity for research
- Issues: constraints b/c military training takes precedence
- However, Military bases are excellent natural areas

Projects on Military bases

- NAAMP Protocol for anuran callings: also tapes (5 min)
- get calling phenology and list of spp and period of calls
- Choruses are all different and vary among sites and years
- Frogloggers
- Get calling phenology from frogloggers
- Also get dielle patterns (frog calling patterns)
- Dip Nets
- Find larval period and relative abundance
- Measure salamanders and stages of tadpoles
- Records in Captures/100 dip net sweeps (very variable so must be a long term project)
- Funded by Legacy of Resource Mngmt
- Extra military activity (gunfire, helicopters, etc)
- Minnow traps/dip netting every month
- Terrestrial animals using cover boards, roofing tins and PVC pipes
- Tree Frogs really like PVC pipes
- Cover boards are not that great...
- Drift Fences also used (use hardwoods, pines, pine/hardwood mixed) What is the effect of silverwood regeneration? Forest thinned for bobwhite areas (sometimes for Pine regeneration)
- Also monitoring bat pops

**9:15 AM**

## Q & A

**Q.** Recognition factor: can identify species, etc.

**A.** Clarification of exact means of study: combination of calling/dipnets to get overall view

**Q.** Can info be transferred to a military tool?

**A.** Military cannot get more lands to train and want to maintain existing lands...so big emphasis on research so can better manage lands

**Q.** Drift Fences: always open or close?

**A.** Run every other week, not continual closed drift fences

**Q.** How can get involved?

**A.** Need to get permission, get funding, know constraints of area

**Q.** Frogloggers...how do they work?

**A.** Go to Circuit City and buy one for about 70 bucks, cheap and effective

## **9:30 am Dr. Robin Jung, (USGS PWRC) Amphibian Research and Monitoring Initiative (ARMI)**

### **In 2000**

- DOI funded by congress
- Set up in 7 different regions
- Want to collaborate with BRD herp WRD hydrologist, etc, USGS will house database
- Want to monitor and research amphibian on DOI land and federal lands, will facilitate with others as well

### **Needs of NE amphibian**

- 90 spp in NE
- 59 Salamanders, 31 frogs/toads....48% are at risk
- greatest decline in streams and ephemeral pools
- NARCAM Reports (amphibian declines) Hot spots of malformation in ME/VT area...why? Need to be concerned with that
- 124 National Parks in NE
- Acadia and Shannandoah funded by PRIMENet
- NPSpecies database ([www.nature.nps.gov/npss/](http://www.nature.nps.gov/npss/))
- Wildlife conservation society inventory 15 parks

### **Research Goals**

1. Acadia: Egg Mass, Streamside Salamanders, Calling surveys UV Experiments
2. (effects on hatching?), 4 toed salamander surveys, Amphibian Distribution, Pitrid
3. fungus study effects?
4. Shanandoah: Pond Surveys, Streamside salamanders, Terrestrial Salamanders,
5. Amphibian Distribution Maps
6. Moderate regional research
7. More general/broad crude national surveys

8. Egg mass counts at Vernal pools: are egg mass counts changing?
9. Streamside salamanders: effected by stormwater runoff, impervious surfaces, riparian buffer widths, etc...
10. Amphibian Surveys overlaid with Delaware River Basin Collaborative Environ Research Initiative
11. Maryland Biol Stream Surveys: electro-shocking, timed search, spp dropping out with any level of development
12. FWS initiated calling survey at 27/57 refuge sites: also using frogloggers to detect all anuran spp present, is survey recording the max chorus codes, document phenology

\*\*\*\* Wanted: Amphibian inventories needed....little information known

## Q & A

Comment: Federal Levels not trickling down to State ppl.

**Q.** Who else is involved currently?

**A.** Just Robin now, writing study plan and budget. Will contract out and get collaborative research

Use of Multiple methods: If can show that one type is producing unique and correct data, and look at overlap..then good overall for research.

## **Meeting Break: 9:45AM- 10:05AM**

## **10:07AM-- Meeting reconvened: Linda introduces Al Breisch**

### **Al Breisch: NY DEC, state herp atlas**

- WV, VA, PA, VT, CT, ME published herpetofaunal book
- Herp Atlas in progress: WV, VA, PA, etc....

**Primary objective:** To document the distribution of all species occurring in wild in given area

### **Secondary objective:**

- increase public awareness (education /outreach) to raise interest and public funding (over years 1800 volunteers)
- Increase info on life history and Habitat requirements
- Opportunity to get into the field

Considerations: mapping units, time frame, data management, type of doc, who provide records, funding

### Mapping units:

- Counties, goal is to have at least one museum spp for each county, 13 states w/ 390 counties
- Town/township/city (4100+2800 cities)
- USGS topo quads (~5000)
- Specific Location (UTM cords or Lat/long)

- Other: subdivided top quad (1/2, 1/4, 1/6), metric squares
- NE 237,000 Square miles in NE

#### Time Frame

- Limited time period or unlimited (including historic data)

#### Type of Documentation

- Vouchered: Museum specimen, photo, literature
- Unvouchered: Observation, chorus, capture and release
- Who does it?: Herpetologist and Volunteer naturalist (w/ training, w/o training but with lots of info)
- Security of information
- Confidentiality of volunteer info
- Rare spp location
- Published atlas (electronically vs manuscript)
- Privileged areas (who owns info)
- Archive of data

#### Funding

- Federal (USFWS: section 6, PFW)
- State (Resource agency, special funds)
- NGOs
- Private Donors/Tax Check-off

#### Q & A

**Q.** Do you have trouble w/ volunteers to vouch specimen?

**A.** Yes, Most volunteers did not want to collect

**Q.** How did you filter records?

**A.** Calling to recheck records, common sense

#### **10:33 AM-- Dr. Charles Smith (Cornell University) GAP Analysis Projects, Herp inventories and Conservation Planning**

[www.uidaho.edu/gap](http://www.uidaho.edu/gap)

#### **Use of GAP Data**

- GAP Anal 12 yrs old → study of biodiversity
- Evolved w/ GIS relying on remote sensing (interrelations)
- Layers: Actual data, terr vert dis, Areas managed for biodiversity protection, threatened and endangered, candidates and sensitive spp localities
- Fine filter biodiversity (spp) and coarse filter (vegetation classification)
- No agreement on exact definition of vegetation, need that and have established a proposed national vegetation classification system

- Traditional gap analysis: where are the Hot spots of high spp and where are the gaps? Led to revision of land acquisition policy
- Context and content
- Content: what, where and how many pp and veg assoc are found; which regions or political subunit have most amphibian species, etc; Ranking ecological areas according to need, within areas, which species and veg are well represented
- Context Questions: Do we have any terr vert and veg only in the study area and nowhere else?; what proportion of fine-filter and coarse filter biodiversity from the larger region are rep'd in study area
- Hudson River Valley Study Area (13% of land area...etc) 324 spp, 83% pf NY species represented; amphibians 25% of spp represented, 58% of reptile spp.
- Good to develop predicted distribution of populations with the use of vegetation

### **Conservation:**

Some insight on good conservation

Awareness-knowledge-appreciation-conservation

### **Q & A**

Comment: Gap Data analysis is kind of a course overview.

Yes, but this is not as labor intensive. If state want to develop in finer detail, then that is up to each state. This is a national program

### **10:55 am-- Group Discussion on Possible Action Items for I & M (Linda Weir)**

#### *Suggestions:*

1. Reptile monitoring
2. Standardized guidelines for herp atlasing (have PARC set national guidelines)
3. Mapping units
4. Fundraising ideas (partnerships)
5. Archiving data (procedural & technological concerns)
  - 5.1. Electronic data storage may not be archival
  - 5.2. Reporting media may not be archival
  - 5.3. Check with professionals (Univ. Libraries, Library of Congress, National Museums)
6. Archiving specimens (concerns with trusting museums)
7. How to prevent atlas misuse by collectors, etc.
  - 7.1. Issue of Freedom of Information Act if governmentally funded
  - 7.2. NY has exclusion from above act for vulnerable species
  - 7.3. Presents additional concerns for archiving
8. Leave flexibility for procedures to differ between states
  - 8.1. What are the goals of the data in each area?
  - 8.2. Availability of use by many agencies
9. NE PARC may be able to take a national lead in this area (9/13 states atlased)
10. Guidelines for use of Volunteers: how to ensure collection of quality data?
  - 10.1. Testing can scare volunteers
  - 10.2. Training is crucial
  - 10.3. Use of volunteers only for public awareness?
  - 10.4. Design of forms can aid in quality control



- 10.5. Use levels of expertise/mentoring
- 10.6. What are the consequences of mistakes? (some may be trivial, others crucial)
- 10.7. Error at the point of data entry (2-4% error rate)
- 10.8. Data to this effect in regards to birding
- 10.9. Could school students do egg mass surveys?
- 10.10. Issues of spread of disease, degradation of habitats, etc.

### 11:35-- Discussion on NE PARC Organizational Structure (Eric Stiles)

Following yesterday's discussion, how can we set up a structure for PARC/NE PARC?

- 1) As much as we believe this is an anarchy, there is already a de facto structure of individuals who have volunteered to be:
  - a. Point of contact
  - b. Communications (website, list serve)
  - c. Action Item teams
- 2) Phases for this discussion
- 3) Generate ideas (brainstorming, not discussing)
- 4) Narrowing of topics
- 5) Closure, in choosing a style
- 6) Brainstorming of ideas: Roles
  - i) Communication
  - ii) NE PARC representative to National PARC:
    1. Point of contact
    2. Funding liason
    3. Spokesperson/Conduit (external and internal)
  - iii) Action Item representative
- 7) Maintain timeline
- 8) Reminder of intended goals
  - i) Librarian/Record-Keeper
  - ii) Steering committee/Coordinating Committee
- b) Purpose?
- c) Does this imply a top-down approach?
- d) Core group essentially is acting as this committee now
- 9) Do we want to continue to function this way?
- 10) How to handle roll-over/individual inclusion?
  - i) Meeting organization committee
  - ii) Structure for choosing meeting hosts (past meeting organizers roll-over to help the next meeting hosts)
- 11) Concerns with above ideas
  - a) Issue of power for spokesperson & steering committee
    1. Who determines what NE PARC says? The whole group? Steering committee? Spokesperson?
  - b) Issue of length of roles
    - i) How long can an individual maintain a NE PARC position?
    - ii) Should a structure be established to roll over jobs?
    - iii) Ad hoc committees
    - iv) Allow more individual involvement
    - v) New members become more active
    - vi) Prevent burn-out
  - c) Could former meeting hosts become new steering committee?

- d) Suggest NE PARC representative and Action Item Representative have longer-term roles
- 12) With recognition of future concerns, votes for roles will now be taken
- 13) Communication (unanimous)
- 14) NE PARC representative (one vote in opposition, consensus reached)
- 15) Action Item representative (unanimous)
- 16) Librarian/Record-Keeper (will discuss at future meeting)
  - 1. Suggestion to put into the meeting hosts
  - 2. Suggestion to put into the communication
  - 3. Separate role (more in opposition than in favor)
  - 4. There are many documents to deal with, perhaps a larger role than first realized (beyond just meeting minutes)
- 17) Meeting Organizing Committee rolling over to become the Steering Committee/Coordination Committee
- 18) Nominations of Names for each roles
- 19) Communications
  - 1. Linda Weir, list-serve
  - 2. Gideon Lachman, website
- 20) NE PARC representative
  - i) Allen Salzburg volunteered
  - ii) Eric Stiles nominated to continue
  - iii) Is it possible to have two individuals in this role?
- 21) Recommendation to have an alternate?
- 22) Length of term?
  - i) Discuss EACH of these roles after one year?
  - ii) Vote for reappointment at next meeting?
- 23) What is this individual's responsibility?
  - i) Point person for National PARC
  - ii) Conduit of information

**12:15, discussion tabled until after lunch.**

Please nominate individually during lunch by writing up names. Note that names listed in the hall have been nominated for Joe Mitchell's committee of 15.

## **Saturday, October 14, 2000 (PM)**

### **1:00pm-- Linda Weir reconvenes meeting**

- **Announcement:**
  - Ann Berry Somers sign-up sheet for Project Bog Turtle Publication
  - Raffle to defer cost
  - Allen Salzburg – ideas for topics for exotic pet trade

### **1:10pm-- Weir mediates continuing talks about NE PARC structure**

#### **Discussion**

- 1 person vs multi-person discussion
- Powers/scope of representative
- Rep for NE PARC to National

- Rep for NE PARC to Press, Congress, other external things (is this needed, perhaps PARC could represent?)

## **Votes:**

1. Education committee vs NEPARC for public outreach

**Vote:** for education committee

2. One person for this role vs multi-person task

**Vote:** one person for this task

3. Two Nominees for the NE PARC Representative: Allen Salzburg. and Eric Stiles

**Vote:** Eric Stiles

Nominees for Action Item Rep: Krista Munger

Coordinating Committee: Tom Tynning, Stafford Madison, Alison Haskell (?), Linda Weir, Robin Jung, Scott Smith

Librarian/Record Keeper: To document future docs: Decided it would be Representatives Job

## **1:30 pm-- Linda intros Stafford Madison, Education/outreach efforts**

(Identification of Action Items)

Road map for dicussion

1. Desired outcomes
2. PARC's involvement in education
3. Framework for grp diss
4. Generate feedback

History of NE PARC Education

Framework for group discussion

- Handout given
- Agree on which conservation issues to focus education efforts on
- Identify message, audience, products and delivery mechanism
- Identify existing effective products and programs to emulate
- Prioritize education products
- Determine project leaders

Broad-based vs targeted outreach

1. Broad based: outreach for awareness of layperson
2. Targeted base

3. Messages
4. Target audiences
5. What we want our audience to do with this info
6. Best avenues for info dissemination

#### Comments/ Ideas

- ❖ Public awareness is good but also need education on habitat management, guidelines (this can be tied into education efforts)
- ❖ Inform and outreach as opposed to complete education (delivery of information and not necessarily the act of education); outreach vs. education; w/ outreach can measure success whereas with education cannot readily measure
- ❖ Two points of view w/ education:
  - Pamphlets to select few and then have it trickle down
  - Small information to pass out to inform: mass education
- ❖ What is the most effective way to talk to land use managers? Response: sit down and bullshit with them. Establish trust and a relationship. (Joe Mitchell)
- ❖ Laura Mazanti's bulleted guidelines was very helpful (R. Jung)
- ❖ Idea of having workshops for educating people- train the trainer program(L. Weir)
- ❖ Hope that habitat is not the only outreach effort, perhaps education on help trade
- ❖ Two ideas on target audience:
  - Education/awareness for ppl who don't know or don't care (State dept of transportation)
  - Education for supporters, already know the issue
- ❖ "When you can't educate them, regulate them"
- ❖ Comment that we should educate the ppl with the power vs. common person (general public awareness) (Allen Saltzburg)
- ❖ Suggestion to pick an issue/audience, and use Stafford's given template to approach that group/topic.
- ❖ NEPARC would be better served to provide tools, not lobbyists.
- ❖ Assist other local groups in providing education and outreach.
- ❖ More accomplished by making connections than providing information.
- ❖ What is NE PARC's role?
  - a. Develop a toolbox
  - b. Not a lobbying organization
  - c. Provide images and facts
  - d. List of target audiences:
    - a. *Republicans for Environmental Action (Martha Marks, president)*
    - b. *Land planners*
    - c. *Land managers*

- d. *Policy makers: MD municipal commission and county commissioners*
- e. *Regulators*
- f. *Educators*
- g. *Developers: DOTs*

❖ Messages

- More to a wetland than wet land: buffers, “life zones”
- Economic value of conservation: Ecotourism
- Internal agency education

❖ Nominations of people to help

Chris Vitale, Jim White, Mick McLaughlan, Liz Johnson, Karyn Molines, Jay

Andrews, Art Hulse, Allen Salzburg, Hank Gruner, Chris Raithel

**2:50 pm-- reconvened by Chris Raithel and Robin Jung: Species/Groups Risk Assessment -Goal: Complete Action Item from NY meeting**

Concerned about loss of species in preserved areas.

- Example, red-spotted newts: with their specific life cycle, how do we know what to preserve to maintain their populations
- Suggestion to go to an area approach, bypassing surveying (no time)

Need to determine goals for conservation

- Monitor species that are representative of systems
- Look at the large scale conservation effort

**3:00 pm to break-out groups by taxa**

**4:20pm reconvene to report by taxonomic group**

Looking to build a predictive tool for species faced with habitat fragmentation

1) Structure of the matrix?

- Pre-provide relative number categories
- Attach status category to list for each species
- Collapse by genus?
- Can we come up with a “sensitivity range”?
- Questions touched on key issues... beyond the standard life history information
- Can any of the topics be combined?
  - Some things dependent on temperature, food availability, etc.
  - Toxicology has an effect

2) Is this information already available?

- Much key information does not exist
- Can PARC develop a list of research priorities?

3) Salamanders

Problems:

- i) Difficult to record on one large piece of paper... provide a
  - (a) template for each species
- ii) Did not come close to touching on all species
- iii) Concerned about reliability of literature
  - 1. Resources are variable
  - 2. Each species info came from a different source
  - 3. Some information came from expertise
- iv) Concerned about specifics of questions/species specific
  - 1. Crossing a road?
  - 2. Philopatric?
  - 3. Specificity was a barrier
    - a. Managers want generalizations
    - b. Range information may be more important

4) Frogs

Problems:

- i) Varied species expertise
- ii) Too large a range of topics to discuss
- iii) Much knowledge on adult stage, but not on eggs or larvae
- iv) If we have a 20 year time frame, we need to focus on this
- v) Added two more categories:
  - 1. Water quality
  - 2. Endocrine inducing chemicals
  - 3. Should add recruitment

5) Turtles

Problems:

- i) Breeding habitat vs. nesting habitat
- ii) Might have accomplished more by listing threats
  - i. Could have made better use of available expertise

6) Snakes and lizards

Problems:

- 1. Gray area associated with many of these species
- 2. Some species hard to categorize diurnal/nocturnal

- Seasonal
- Fossorial

3. Much is unknown about many species (even home range)
4. Largest bulk of information available on viparids

7) Feedback on whether this would be a useful product

- Key in on vulnerability of individual species perhaps not recognized as such
- Have students compile this information from sources, then get expert opinions
- Highlight the questions that need to be answered for the preservation of species
- Helps NE PARC to identify threats and set priorities
- Most organizations don't have a reference like this for management

8) Now what?

❖ Opportunity for academia to step in

- One academic per taxa group
- Salamanders, Tom Pauley

❖ Snakes, Art Hulse

❖ Turtles, Carola Haas

❖ Frogs, Chris Raital & Robin Jung

- o Be sure of the quality of the data
- Reference the information (cite each source)
- Reference individual expertise
- Someone needs to coordinate this effort
- o Have students compile life history information, but have experts fill in the vulnerability

Robin will enter the data from this meeting as a first draft

**5:00pm adjourned**

**Sunday, October 15, 2000**

**8:40am Scott Smith Reconvenes meeting**

**8:45 Craig Hoover, TRAFFIC**

I. Ensure that wildlife trade is at sustainable levels

1. TRAFFIC mission
2. In accordance with domestic and international laws
3. Volume of Imported live reptiles to US

II. Consistently at over 2500000

III. Dramatic increase throughout the 1990s

IV. 1970s, 80% was turtles and tortoises, now 40% green iguanas

V. 1996, was 2% turtles and tortoises

1. Total US Exports of Live Reptiles

VI. 5 times more than we import

VII. 8-10 million annually

VIII. export of natives and re-export of non-natives

a) § 250,000 green iguanas annually

b) § primarily red-eared sliders, 90% of annual trade

2. Turtle trade

IX. Primarily export trade

X. Imports supply demand for pets

XI. Exports supply demands for pets and food

XII. Imports are primarily wild-caught

XIII. Exports are primarily farm-produced hatchlings

XIV. Main species imported

a) § Malayan box turtle

b) § Leopard tortoises

c) § Pancake tortoises

d) § Greek tortoises

e) § Russian tortoises (largest volume)

f) § Spurred tortoise, of Africa

(1) · Export over 5 times what we import

(2) · Recent prohibition on imports due to disease threat

(3) · No more import of wild-caughts

(4) · We are the sole world-wide supplier

XV. Main species exported

a) § 8-10 million live per year

b) § mostly red-eared sliders

(1) · only sold for science and education domestically

(2) · mostly going to Asia and Europe

c) § excluding red-eared sliders, only approx. 250,000 per year

(1) · map turtles make up the majority, steadily increasing since early 1990s

(2) · Potential conservation threat, as breeding stock for an increased demand will come from wild

(3) · Map turtles and false map turtles now found

(4) · Soft-shelled turtles now commonly traded

XVI. Substantially wild-caught trade

XVII. Only limited breeding

XVIII. Trade somewhat increased through the 1990s

(1) · Alligator and Common Snappers

XIX. Predominantly farm hatchlings

XX. Wild-caught for food and display

XXI. Asian market is lucrative

XXII. Sources of exported turtles

a) § Private farm, example given in Florida

(1) · Chinese-run

(2) · 8,000 adults in pond, all soft-shells

(3) · Not a closed system (wild-caught breeders)

(4) · Eggs kept in barns

(5) · Competing with Chinese farms in China



- (6) · Trying to raise them to food size, difficult
- (7) · \$.80 per pound for breeders live caught
- b) § Corporate farm, example in Louisiana 95%
  - (1) · Red-eared sliders
  - (2) · Commercial operation
  - (3) · Diggers, pickers, sorters, washers...
  - (4) · Dipped to remove salmonella contamination
  - (5) · 1 million turtles produced per year
  - (6) · Hatchlings kept in cooled storage until price is right
  - (7) · Closed system

XXIII. Trade in Turtle Parts

- a) § Low level, inconsistent trade
- b) § Some export of softshell turtle meat (1080 kg)
- c) § Some export of common snapper meat, shells and skulls
- d) § Single export of snapper skin
- e) § Some export of eggs

2. Import trade fairly low volume

XXIV. Mostly exotics

1. Exports are high volume

XXV. Predominantly closed-system farmed

XXVI. Predominantly red-eared sliders

- a) § Not a concern to wild populations
- b) § Market is declining
- c) § This is the threat, that the market will shift to less-hardy species

XXVII. Trade for food is increasing

1. Publications available

XXVIII. US role in reptile trade

XXIX. Newsletter on Current topics

XXX. List of world turtles, CITES focus

XXXI. Asian turtle trade and species, proceedings from meeting (CRF)

**Q:** Are inspections required on turtle meat sold in the US?

**A:** There is very little regulation.

**Q:** Markets prefer wild-caught turtles, and can recognize them.

**A:** More true with hard- than soft-shelled turtles.

**Q:** Executive order to curtail invasive species, will this affect this trade?

**A:** Only if the species pose a threat to US listed species.

**Q:** Has the increase in herpetoculture driven the increase in trade?

**A:** When bird trade shut-off, herp trade increased. Even dealers shifted focus. Many factors involved.

**9:15 Ernest Mayer, USFWS Special Agent**

Not a herpetologist, a law enforcement agent.

Wants to generate questions and thoughts from the group that might affect our later discussion.

Publications available, law enforcement reports.

The Dark Side of the Reptile Trade (a small part, but his focus)

I. Illegal Collecting

- a) § USFWS only enforces on certain lands
- b) § Not other countries

II. Unlawful Trade

- a) § In State, Interstate, and Internationally
- b) § Their main focus of enforcement, mainly international
- c) § Compile data, readily available

III. Unlawful Introduction, Re-introduction

- a) § Not a large focus, but important
- b) § Farming, "reintroduction", etc.

2. Some case examples

IV. Export of hellbenders from Ozarks

- a) § Commercial interest in wildlife is long-standing

V. First covert operation in 1970s called Atlanta Wildlife Exchange

- a) § Individuals interested in capitalizing on protected animals
- b) § Became apparent that this was an international problem
- c) § At same time, the revelation was being made worldwide that there was a growth in the reptile trade, and in inappropriate animals
- d) § Both local and large scale operations

VI. One German organized operation:

- a) § International reach
- b) § Included smugglers, couriers, etc.

VII. Often illegally import and breed, and then "legally" sell hatchlings

- a) § Laundering operations

2. Challenge of regulating trade

VIII. May increase value of animals and increase trade

IX. Become target species for collectors

X. Laws must be carefully thought out

1. Why do people get involved in the illegal trade?

XI. Profit, money to be made

- a) § Some species sell for 10-15,000 dollars per adult
- b) § Only cost is in the challenge of import

XII. Vanity (I have something you don't)

XIII. Obsession (largest, rarest... must have them)

XIV. Misguided Idealism

- a) § By smuggling and breeding, they'll save the population
- b) § Will be prosecuted despite intentions
- c) § Larger occurrence than may be thought

2. Situation

XV. Negative Impact to Natural Resource

- a) § Diminished populations

XVI. Poor Public Perception of the "herpetological community"

XVII. Legislative Over-reaction

- a) § Overly restrictive laws
  - (1) · May not address resource needs
  - (2) · May be unenforceable
- b) § Laws not based on scientific principals, not reaction to situation

## 2. Why does this occur?

XVIII. Life-long individual interests

XIX. Scientific and nature interest (hobbyist or scientist)

XX. Desire for individualism (not a dog or cat)

XXI. Media influence (emulate the stars, Jurassic Park, rock stars)

XXII. Home Environment

a) § Especially seen in Japan

b) § Herps are easier to keep in apartments than other pets

XXIII. Pet trade influence

a) § Limitation of Bird trade

b) § Availability in Pet stores, exposure to wider audience

## 2. Recommendations

XXIV. Uniform state and federal laws based on sound scientific research

a) § Must protect and enhance our resources

b) § Must be enforceable

c) § Uniformity nationwide

(1) · Public understanding and acceptance

(2) · Aid the legislature in enforcement

XXV. Stringent Enforcement once law is passed

XXVI. Fair, firm, equitable judicial action

a) § Judicial system must stand behind the laws

XXVII. Peer pressure

a) § Get away from “don’t ask, don’t tell” mentality

b) § Inform others of concerns and dangers

XXVIII. Industry self-regulation

### 1. Vision for the Future

XXIX. Self-sustaining wild populations

XXX. Genetic pool for future reintroduction

a) § Scientific institutions

b) § Private breeders

XXXI. Increased awareness of the resource and the problems they face

XXXII. Acceptance

a) § Of the resource

b) § Of the people who care about it

- Summary: “The survival of many species of reptiles and amphibians will depend on uniform laws based on sound scientific principals which protect and enhance the habitat and diversity of wild populations; the active and impartial enforcement of those laws; and swift, fair judicial action...”

**Q:** Are there pitfalls in writing laws that aren’t enforceable?

**A:** Advisable to get an enforcement officer to offer input whenever involved in writing legislation. Look for loopholes that traders could make use of. Quotas are very difficult to enforce (only certain number allowed to be exported... no way of keeping track)

**Q:** What is a “vicious” animal? Judgement call in enforcement may vary between individuals. Common names, half-breeds may cloud this distinction.

**A:** In agreement.

**Q:** Example of well-written legislation?

**A:** Thou shalt not laws. It's illegal to sell (species). But this is the most restrictive law, and may not be the best for the resource. (may increase the market). Even better is "it's unlawful to possess". Doesn't matter the source, it becomes contraband. Easy to enforce, easy for the courts to back up.

**Q:** What's the conservation benefit? What new threat is being posed? This is not the largest threat to most of these species... legislation will not solve the entire problem, must also look at habitat loss, etc.

**A:** What are the most important species on which to focus legislation, thereby directing limited enforcement resources.

## **9:55 – Scott Smith speaking in lieu of Tim Hoen who was unable to attend**

### **Tim Hoen, biography**

President of the MD Herp Association

- I. Only allows captive-raised animals at festivals
- II. Lots of education enforced
- III. Care and humane housing is featured
- IV. Money from the show is used wisely
  - a) Workshop for land managers on bog turtles
  - b) Money to Costa Rica for habitat conservation
2. No matter what we do, people will keep and breed animals
- V. Saying no isn't going to work
- VI. Opportunity to let people know how to do this wisely
- VII. Don't turn good people into outlaws, losing potentially tremendous allies.
  1. List of positives and negatives of captive raising of herps
- VIII. Positives
  - a) Many breeders/collectors are very knowledgeable about the animals
  - b) Many have developed captive breeding techniques that we can use in management
  - c) Help public develop empathy for these species (herp shows, if done right)
  - d) Many know where the animals are located in the wild
  - e) Potential source of animals extinct in the wild (future release)
  - f) Supporting collections and breeding research at their own expense
  - g) Gene pool repository for species not housed in zoos
  - h) Put into practice techniques, technology, and information that stem from our research
  - i) Repository for confiscated animals from illegal trade (enables the laws to be enforced)
  - j) Rehabilitation of injured wild animals
- IX. Negatives
  - a) Impacting wild populations worldwide for the source of captive-bred animals
  - b) Release can cause difficulties despite good intentions
    - (1) Disease concerns
    - (2) Genetics
  - c) Reptile shows may increase demand for animals
    - (1) Increase may impact wild populations
    - (2) May encourage illegal trade in back-room deals
  - d) Misguided idealism
  - e) People are greedy
  - f) Destruction of habitat during collections, repopulation not possible

- g) Justification of habitat destruction (gene pool in captivity)
- h) Decreased awareness (if being sold, populations must be ok)
- i) Introduced non-native species
- j) Animal welfare
  - (1) Mortality involved in capture
  - (2) Uninformed pet stores selling species
- k) Perceived or actual danger posed to humans by certain species
- l) Promotes the thought that herps are pets
  - (1) Ok to have them
  - (2) Ok to pick them up
- m) Legal trade can provide cover for illegal trade (difficult to discern differences)

2. How do we want to deal with these issues?

X. MD has decided on regulations (Scott Smith can cite)

- a) Annual police force training in herp lds and regulations
- b) Pet trade regulations

2. Is there a list of herp shows nationwide (Reptiles, Reptile and Amphibian)

3. Handouts:

XI. Model State Herp Regulations from Sept. 99 NE PARC committee

- a) List of 19 things that need to be addressed
- b) Was sent to National PARC in March
- c) Some issues still need to be dealt with
  - (1) Add to list: make enforcement officers aware of windows of vulnerability for certain species (to focus efforts)

XII. Add this to our table of species characteristics

XIII. Discuss model enforcement

XIV. Annotated Outline for Model State Herptile Regulations (edited from Tom French's December 20, 1999 draft)

XV. Q: how can you regulate the takings of non-native species? A: regulate the method of taking, establish legal authority

- a) Don't overlook importance of uniformity of legislation
- b) Model regulations should explain the value and benefits of regulating native and non-native animals (common loophole danger)
- c) Should state regulations go beyond state's resident species to include ESA listed species outside the state to allow enforcement of trade (would state government allow it?)
  - (1) Currently, must cross a state line to be in violation of the Endangered Species Law or Lacey Act
  - (2) Pet trade individuals know these laws in and out
  - (3) John Bethel's annual guidebook (pros and cons)
- d) Provide avenues for cross-boundary cooperation
- e) There will always be illegal activity that will be unable to address
  - (1) Craig Hoover doesn't advocate inclusion of CITES list in legislation
- f) Discussion on the inclusion of the word human (important)
- g) A2(b), discussion on term "bait" (danger in non-native introduction)
- h) A3(d), pit-tagging, a good idea but hard to implement
  - (1) Move to delete this suggestion
  - (2) Maintain for rare populations as an enforcement tool and scientific population data
  - (3) Uniformity of equipment is important for enforcement... technology change can affect this issue
  - (4) Move to "other considerations"? or "Scientific collecting"?

- (5) Move this to B3, as strongly encouraged?
- (6) Specify for certain long-lived species?
- (7) List pit-tagging only as an example... many other methods to establish a permanent record
- i) B1(a) add seasonal and size considerations to restrictions
  - (1) - Are takings correlated with possessions? Add word "possession" to 1a.
- j) B2 also add seasonal and size considerations
- k) A1 question as to why a permit is not needed for classroom/pet use, but not for food or bait?
  - (1) Disparity
  - (2) Education values important
  - (3) Add recommended guidelines for taking and keeping for pets

XVI. Length of keeping

XVII. Keeping with/without other animals nearby

XVIII. Procedure for review for release

- (1) Difficulty for rehabbers
- b) Page 3, change last lettering from e & f to f & g
  - (1) Add B3(h) to incorporate permanent records concern from A3(d)
- c) "captive-bred" is the most definable term (vs. captive raised or captive born)
- d) B5 has the inherent difficulty of encouraging variation from state to state
- e) In B5 Identify unit of regulation as state, not range of animal
- f) B3(f) define:
  - (1) Numbers born in captivity
  - (2) Numbers died in captivity
  - (3) Longevity
  - (4) Disposition of offspring (where they went)
  - (5) Also put under possession and propagation
- g) B4 add an (f) that requires submission of data to state organizations as a condition of the permit (and enforce)
- h) Remove B5(b1) remove article cc.
- i) May be important to define "take" or "appropriate" methods of takings
  - (1) Definitions differ among organizations
  - (2) Committee to email a discussion on this topic

XIX. These corrections will be added and emailed to all in attendance

- a) Allow a 2 week time limit for comments
- b) After comments, list will again be updated and submitted to National PARC

**11:15 break for food**

**11:44 Meeting reconvened by Eric Stiles, Review of Action Items**

**Accomplishments:**

- Identified that need to be far reaching in scope and to affect others beyond the NE PARC group
- Proposal is being used as a tool for others as well
- Structure has been established-yeah!
- List serve is up and website is running as well

## Action Items:

- ❖ Identified that is important to develop a list of regional herpetologist
- ❖ Possibly an online registration list, one way entry, not available to general public. Hard copy given to participants of next NE PARC Meeting and only to others who have registered online. (Linda, Suzie, Gideon, Eric)
- ❖ Chris Raithel got an e-mail address and can share his documents by giving to Gideon to post priority items
- ❖ Establishing list of related grey literature and books, anything w/ implications for herpetology. Would like hard copies of this material. Due ASAP.
- ❖ Habitat mngmt for Herps, Deadline is Jan 15 (Sent to Kurt Bulhmann in Georgia)
- ❖ Priority List on web by Dec (Gideon and Chris Raithel)
- ❖ Meeting minutes will be posted on web by November (Thanksgiving)
- ❖ Results of Structure must be given to PARC (Eric Stiles)
- ❖ Education tool development: should have a rough draft by next meeting (Stafford Madison, et al)
- ❖ Role of National organization as an Archive Location for NE PARC and others (Thanksgiving deadline, Eric Stiles)
- ❖ Begin population life history, vulnerability, risk assessment. (Robin Jung, in 2 weeks will e-mail to the 4 groups and Krista Munger the tables that we did work on) The groups will then fill in w/ relevant citations (Due by March 1<sup>st</sup>)

## 4 groups (Life History , use of habitat and movement)

- Art Hulse- snakes and lizards
- Tom Pauly's lab- Salamanders
- Carola Haas and students: Turtles (help from Joe Mitchell)
- Chris Raithel and Robin Jung- Anurans

Finish Model Regulations: Scott will send out drafts with the comments given on 10/15/00 in two weeks, small group discussions on "take" (Scott, Al B, and Mike K) Will post to web and National PARC

Propose list of species involved in trade that are difficult to breed and recommending registry of captive breeders as part of CITES animal committee (Mike )

Comment: Craig Hoover, already have a registry list of species will be very low...mostly will be foreign species

## 12:12 pm-- Scott comments that need to have a connection between State and Federal agencies and research work, need list of contacts.

1) Need to compile state contacts list for each state and federal ppl need to funnel info. (Al will send to Robin)

2) Need a list of projects according to regions they are being conducted in.

Continuing themes for next meeting:

- 1) Database of NE Projects (research)

1. Review education draft product
2. Chris and Robins Risk Assessment Project (at next meeting need to complete vulnerability)
3. Joes update on mngmt product
4. Report on Model regs potential future topics (Next meeting: Potential enforcement of these established regs)

Two Possible Ideas:

- 1) Can try preproposal idea: one page proposal sent in and ppl can vote on it 1 month prior to the meeting for ppl to review and vote as a Priority list
- 2) Not all actions should be within the group. Need to have tangible results. Bring "on the ground problems and brain storm about possible solution on the problem...actual tangible results for a real, distinct problem. If have tangible results that come out of meetings will be good.
- 3) Host state can propose a problem and coordinating committee will come up with a topic.

**12:24pm-- Tom Tynning and Stafford Madison will be hosting meeting in Massachusetts  
Location: Berkshire Community College**

Robin Proposed that only have one meeting per year (as opposed to 2) and not having it in March because Spring is busy field season

Comments:

- Robin, too much work b/c 6 months is not enough time to plan, also busy field work (Meeting in spring would effect attendance)
- Allen: if have it twice a year it is more effective and increases productivity and have deadlines
- Linda: Action items every 6 months would generate more productivity
- If it is only once a year then if miss one meeting will be out of the loop.
- Scott: If once a year then need to have on weekend so that it can accommodate all
- Eric: if twice a year then can alternate meeting location so that more people can attend at least one meeting a year
- Also budget constraints would make difficult for ppl to attend
- Possible alternative forms of meeting (electronic format)
- Possible have meeting every 9 months?
- NE Meeting of the Wildlife Society in NY. Will be presenting PARC as a society. Can have an ad hoc meeting at place/meeting where ppl will already be
- Or just voting for next meeting date at each meeting

**Vote:** Should we have small ad hoc meeting at the NE Wildlife Society in April 2000-Yes

**12:40 pm Thanks to:**

- Donations of Smithsonian Press
- Allen Salzburg
- Planning committee, Al B., Linda, Robin, Scott, and Laura.
- Last minute comments:



- AI suggested that if anyone wants to host meeting in 2 years
- Scholarship cost for ppl to come to meeting and help fund future meeting (possible auction to raise funds)

**12:45pm Meeting adjourned**