



**Minutes from the 2008 Meeting of the
Midwest Regional Working Group of
Partners in Amphibian & Reptile Conservation (MW PARC)
4 - 6 September 2008
Camp Abe Lincoln
Blue Grass, Iowa
www.mwparc.org**

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MW PARC 2008

5 Sept 08

9 A.M.: bioblitz wrap-up

9:20 A.M.- Introduction to PARC by Priya Nanjappa Mitchell

PARC: diverse network of citizens, professionals, and organizations dedicated to herp conservation

Designed to connect, coordinate partners

Focus on herps and their habitats

National PARC priorities determined by regional working groups (NW, MW, NE, SW, SE)

-Keep common species common

Perhaps PARC can become a North American group extending into Canada, Mexico

At state level there is a new amphibian and reptile subcommittee

PARC's role: identify and address issues, disseminate information

9:40-Beyond identification – on to implementation by Greg Lipps

PARC is the herp community's response to the implementation crisis

Conventional wisdom

Common Sense

1. more evidence will produce more action
2. Incentives will change behavior
3. When people know what to do, they will do it

However, attitudes or knowledge may change without changing behavior

People are not always motivated by money—good land management, aesthetics, attachment to the land motivates people

-There is a knowing-doing gap

We need to effectively implement conservation strategies

Work on how to implement what we already know

Announcement: Next Snake Ecology Group will meet in Idaho prior to the Joint Meetings of Ichthyologists and Herpetologists in 2009

10 A.M. Keynote Address: Basic behavioral and Ecological Processes: A key to finding conservation solutions- by Raymond Semlitsch

Focus on how populations are regulated and grow in basic ways, then we should be able to understand decline

Threats: 1. Habitat destruction, 2. Global climate change, 3. chemical contamination, 4. disease and pathogens, 5. invasive spp., 6. commercial exploitation

Understanding basic behavioral and ecological processes of pond breeding spp. inform land management decisions

Critical issues of habitat loss and fragmentation: scale at which pops are structured. How big an area to populations need? What are the habitat requirements for persistence? At which the scales are metapopulations structured?

Basic processes are important for managers to understand: aquatic and terrestrial core habitats are essential to carry out life history functions for pond breeding species. Habitats can not be managed independently. Pond breeding amphibians spend majority of their life on land. Important terrestrial associations such as mammal burrows Similar for turtles and snakes-made for habitat outside the wetland.

- More value should be given to land closer to wetlands versus further to assign wetlands mitigation credits
- Within a general habitat area, are there specific areas? Are some needs sex-specific? Are there species specific needs? What microhabitats are amphibians using and why?
- There are physiological and behavioral constraints on amphibian movement which interferes with metapopulation dynamics—eg: Hydration limited, limited locomotor ability, limited perception distance, of parent search pattern

Land use can interrupt connectivity and population dynamics-there may be habitat resistance or ontogenetic shifts in habitat needs

- Project LEAP (landuse effects on amphibian populations)-address behavioral and ecological processes under different timber management situations

Can we develop conservation solutions?

- Understanding basic processes is essential for balancing amphibian conservation with habitat change and land use.

11 A.M. Build it and will they come? Colonization patterns of amphibians at newly constructed wetlands –Stephen Mullin

Amphibians are likely indicators of environmental change. What are amphibian responses to mitigation and habitat modification? Can loss be reversed? Will colonization patterns differ? Will site differences matter?

-Examined colonization patterns of constructed ponds at different sites-39 ponds constructed and two shallow water wetlands. Bulldozers scraped depressions to clay lens. trenched area for drift fence. 6 ponds in old field habitat and 4 ponds in forest. There was damage from deer and wind two ponds and fences, heavy rains caused siltation and flooding. Incidence of colonization varied with species. Fowlers toads colonized in greater numbers than other species. Fowlers toads colonized forest ponds in greater numbers than field ponds. Incidence of colonization varied as a function of habitat type with forest ponds having more captures. There was no species x habitat type interaction(possibly skewed by bull and leopard frogs).

Conclusions: colonization within a year of construction. Fowlers toads common, may be opportunistic?, greater population density? Forest ponds are more likely to be colonized by a greater number of species. Captured data supported by chorus activity and larval abundance.

Implications for management: 1. Pond construction: ensure integrity of basin and down slope barrier. Hydroperiod should be ephemeral but extend into late August. Minimize erosion to prevent siltation. Provide structural complexity within aquatic habitat.

2. Amphibian conservation: identify habitat with the greatest species diversity. Consider natural history prior to construction. Matrix of ponds within different habitats across landscape likely to promote community diversity and maintain metapopulation dynamics

11:20 A.M. Translocation: establishing new populations, conserving species – by Edythe Sontag

Translocation of Blanchard's cricket frogs in Michigan

-Blanchard's cricket frogs are a species of special concern-plans to uplist to threatened. Habitat loss, pollution -> decline

SE MI Has 3 natural extant populations and 2 populations from translocation

2004 study of habitat preference to allow assessment of proper translocation site. Found large population at gravel mining operation slated for development.

--Collaboration of multiple partners (zoos, universities, contractors, township volunteers, and media)

MI DNR release sites-restored wetlands part of wetland mitigation bank

Redesigned mitigation site based on data collected from the destroyed pond

Port Huron site- very successful

St. John's site- moderate success

Zoo site- not very successful (because of bullfrog and green frog presence)

Lessons:

Work can be done quickly and cooperatively.

Contractors and others can work together.

Translocation not 100% success but can establish new populations.

Publicity and volunteers made big difference.

Nothing goes as planned

11:40 A.M. A multi species translocation effort: methods for success- by David Mifsud

History: baseline data on wetlands in Ann Arbor, MI-slated for high school construction-herp rescue/ translocation

-developed methods and partnerships for rescue and translocation

-3' Fence works better than 1' fence

Encountered protected species → worked with developers to create species protection plan, transferred water to inoculate mitigation wetland and constructed a well to supplement hydrology needs

14 species total (10 amphibian and 4 reptile)

~400 animals that were relocated on site to allow them to breed naturally

Another 4000 metamorphosed amphibians relocated in late summer

< 1 % animals did not survive captivity

Diverse array of macroinvertebrates supports amphibians-results of inoculating with historic pond water

Two sites in the city as recipient sites based on historic species assemblage and proximity to historic site. Animals were released post breeding

Lessons and limitations:

Conduct inventories prior to rescue and translocation

Develop a strong team for project
Be open to new ideas
Construct mitigation prior to destruction
Provide as many contingencies as possible
Plan for lots of meetings
Realize that something is better than nothing even if every last animal not moved

1:30 P.M. Impacts of human development on fish, wildlife, and water quality- John Hiebert/Carol Hall

Minnesota DNR Shoreline habitat grant program

Increasing development of lakeshore > 500% change in seasonal housing density

Impacts: loss of habitat, erosion, nutrient runoff

Aquatic plant restoration program 1999 → shoreline habitat program

Works with government, watershed districts, lake associations \$400,000 budget

Grant covers 75% of project cost-projects on public and private lands

-establish a demonstration sites throughout Minnesota, at least 25ft. buffer from water's edge and 75% of the lakeshore frontage, Landau owner commits to restoration for ten years

www.dnr.state.mn.us/shorelinemgmt/index.html

Demo sites, workshops, materials (CD ROM and books)

Restoration of options: 1. no mowing , 2. supplemental no mow- Treat exotics,

3. Full restoration with seeds

“Restore your shore” plant guide for landowners

Problems: need more maintenance, more time for technical advice, projects become more complicated

Program Changes: provide technical advice and review of site plans rather than providing installation and other hands on work

Summary: new concept for folks-address technical info through demonstrations, provide a diverse message to the public, identify and cultivate partnerships, develop interactive tools, protect existing shoreline, stress maintenance

1:50 P.M. Lessons from the recovery of the Lake Erie watersnake – Kristin Stanford and Richard B. King

Lake Erie watersnake recovery successful due to: biological aspects, small geographic area, fast breeding/ gobies

Lake Erie watersnake listed in 2000 (USFWS)

Recovery plan accepted September, 2003

1. population persistence-specific target population sizes

2. Habitat protection and management-specific goals for shoreline and island management

3. reduction of human induced mortality-reduce intentional mortality → change attitudes

-Since then, population size met, windfall land purchases and easements, public opinion polls and follow-up surveys during process

-October 2008 recommendation to proceed with delisting

-How did we achieve a recovery quickly and why?

Partnerships : USFWS/ NIU/OSU/ODNR and volunteers, residents, and others – helped with funding/support/logistics/data collection/management/education/easement initiatives

Proactive : telemetry and mark recapture started immediately following listing, education/outreach began

Positive but prudent : be honest and realistic: the organism, issues, solutions— use surrogate animals to promote overall snake conservation and provide a positive experience (fox snakes), be approachable- (friendly, fun, and female), ‘educator not enforcer’

Persistence pays off: top 2 means of education for island residents: 1. LEWS News, 2. Island Snake Lady—be identifiable and available

for kids: nature camp, snake lady

-Remember to say thanks

2:10 p.m. Range expansion of eastern collared lizards (*Crotaphytus collaris*) in Missouri- Jeff Briggler

Ozark glades in Missouri and Arkansas→desert microhabitats in forest matrix

-Collared Lizard range expansion plan implemented in 1996: 5 year plan, 5 locations, 9-12 lizards per location (1M:2F)

remove cedars from glades and burn glades, have heritage sites and introduced sites, they will colonize quarries

-Adult surveys in July 2003 and June/July 2007 (measure, weigh, tissue sample)

Habitat requirements: ground vegetation, bare ground, ledge rock, unconsolidated rock, canopy cover. Transects – sighting tube (2 meter intervals)

Failed sites had more ground veg or tree overgrowth

Glades require maintenance—burning and clearing of trees

Summary:

Release: 6 locations, 1M:1.45 F, bedrock of ~10%

Post-Release: 4 locations successes, 2 failed.

In 2003, 1 M: 1.11 F In 2007 15-20% bedrock

Threats: maintaining habitat is difficult, collectors

Initial success – adult survival

Intermediate success- reproductions

Long-term success- varying cohort sizes, breeding and die-off of introduced adults, augment population every 10 years

2:30 P.M. Developing monitoring methods for amphibians and reptiles in the great lakes – Gary Casper

Objectives: Test a variety of standard survey methods, develop detection probability statistics

-little data on effectiveness of methods

Problem: if a species is detected we know what it is there, but if not detected either not there or it was missed--false negatives

Quantify and correct for false negatives

Percent area occupied-modeling trend analysis-just need a presence/absence data

Modeling occupancy rate → PRESENCE or MARK software-conduct covariate analysis, detection probability>0.3, good occupancy estimate

-First determine detection probability, define sampling protocol, sample at least five times, calculate detection probability (DP)

Tested six methods:

Call surveys-successful for some species

Aquatic funnel traps-effective for salamanders unlike call surveys

Snake boards

Casual observations-most spp-poor detection

-Compare detection probabilities by methods across species

Application: how many samples required for confidence?

Minimum number samples at 95% confidence = $\text{LOG}(0.05)/\text{LOG}(1-\text{DP})$

Inventory versus monitoring: inventory is a species list for a study area. Monitoring determines a trend in occupancy or numbers, requires repeated sampling over time.

-Citizen monitors may perform inventory or monitoring or both

Conclusions: use the lowest detection probabilities for confidence in inventories, use species with high detection probabilities for monitoring programs

What next? Partnerships for regional data analysis, program oversight etc., PAO method can be applied to any critter you want to monitor

3:10 P.M. Midwest's most vulnerable herp – Bob Brodman

170 species and subspecies in Midwest, 86% listed by at least one Midwest state

8% not listed by any Midwest state, 6% not ranked, 0 listed as G1/endangered

10% listed as G2/T2 – 3/threatened, vulnerable, near threatened

Midwest mission-keep a common species, and by protection of peripheral populations at state level

MW PARC Rank??-What drives our ranking? Global versus regional threats

What are our criteria? (Bruce Kingsbury)

North east PARC examined species endemic to their region, not necessarily endemic to states (Priya Nanjappa Mitchell)

We should pay more attention to species at their range limits (Gary Casper)

Global ranking dilutes our focus the versus state ranking-global rankings are distracting-for example, timber rattlesnakes should be of interest for Midwest PARC (Tom Anton)

So we would need interactions across state lines (Meredith Mahoney)

Copperbellies sit where three states meet-need more coordination (Bruce Kingsbury)

Two species stand out-Massassauga and cricket frog both in trouble on northern edge of their range. (Bob Hay) We should agree to take some conservation steps as a region Hellbenders as well (Bob Brodman)

3:50 P.M. The eastern Massassauga in the Midwest- Mike Redmer

Not federally endangered-EMR ten years after becoming a candidate

-Early 1990s-funded range wide status assessments in ten range states

-Mid/late 90s-losses/declines documented in all ten range states

-1998-EMR qualifies as a candidate for listing

Canada-threatened, U.S.-candidate since 1999, listed in range states

“conserve candidates now”-policy: works with states and NGOs to conserve habitat, start new partnerships, work with species experts-monitor populations and address the data gaps

Habitat conservation: encouraged and find habitat restoration and enhancement projects, encourage acquisition of the parcels, implement planning of projects that may impact occupied habitat

Examples of new and existing EMR partnerships: AZA started species survival plan for EMR in 2007, Illinois EMR recovery team 2005, three international symposia on EMR (Canada)-fourth in 2010

Numerous studies and monitoring of EMR population trends

Data gaps-population biology and genetics: genetic studies underway to identify wild/captive haplotypes

Distinctiveness of eastern/western, open versus closed populations, VORTEX PVA models-adults are key age class-adults mortality must be limited to the greatest degree possible

Threats: row crops → ethanol, road mortality, timing of prescribed fire-Poor public perception

The timing of prescribed fire-essential tool for EMR habitat management but during EMR active season it is potentially serious threat

Two paradoxes: passionately liked or disliked, crucial management practices may also sometimes pose threats

We are implementing conservation measures but we are losing ground it is not quite enough

EMR's future: multiple threats and complex issues are allowing declines to continue and accelerate. Species experts tell us EMR could be lost in several states.

This year: 10 year status update – structured decision-making format, experts in modeling/genetics/states and provinces field and documents and empirical model to identify most crucial data gaps and guide USFWS next steps (listing primarily)

Federal listing: provides tough penalties for unauthorized take-but research/conservation measures may be more difficult

Midwest states updates

Illinois –(Meredith Mahoney): 5 year review of T/E species listings.

Mudpuppy→threatened, smooth softshell turtle→endangered, ornate box turtle→threatened, Blandings Turtle →threatened→endangered. –Need more information on smooth green snakes, eastern hognose snake, crawfish frog

Indiana—(Bob Brodman): Recommended changes in regulations for game species of turtles in state (changed season so no hunting in nesting season) and limiting size and number taken. (Bruce Kingsbury): Zach Walker moving to Wyoming so new herpetologist position open and his helpers are leaving.

Iowa—(Karen Kinkead): Flooding interfered with hibernacula and basking structure construction, will try again next year. Moving forward on implementing State Wildlife Action Plan by establishing taxonomic subcommittees. Jeff LeClere is the chair of herp subcommittee- need to set population goals. Jeff Parmalee and Jeff LeClere have books coming out on Iowa herps. All 3 species of map turtles can no longer be harvested in

Iowa – commercial harvest allowed only for softshells, snapping turtles, and painted turtles.

Kansas (Jason Daniels): Kansas Herp society meeting in November. KS inventory and monitoring program is ongoing. KS, NE, MO, IA designing a monitoring program as part of core Missouri River Restoration. Update to state field guide coming soon.

Michigan (Yu Man Lee): MI herp atlas will continue- still data gaps. DNR changed herp regulations for take—phasing out commercial take of snapping turtles, MI EMR conservation agreement ramping up soon- draft in next few months. Examination of prescribed burns on EMR. K-12 educational materials, turtle fence road project with DOT in western MI (\$500,000)—post fence surveys- reduction in mortality. Analysis in progress. Recommended cricket frog to State Threatened and marbled salamander to State Listed. New state records of 6 lined dusky and northern 2 lined salamanders.

Minnesota (Krista Larson): Revising endangered spp list. Spotted salamanders found in 2001—spp of special concern. Overharvested snapping turtles- delisted. Phasing out commercial turtle harvesting. Only renewing existing permits- no new permits (~26 permits currently). Rat snakes of concern, need more information. Bullfrog efforts ongoing. Citizen science project targeting bait shops selling bullfrogs. Timber rattlesnakes- land owner education efforts- reduce human-caused mortality, and habitat restoration. (Carol Hall): Ongoing biological survey, nearing end of effort to work toward state wildlife action plan. New 4-toed salamander records, need to confirm blotched tiger salamander recovery plan. Hope to initiate state recovery plan for wood turtle and updating state field guide.

Missouri (Jeff Briggler): Hellbender—12 projects, research with St. Louis Zoo, releases, telemetry. Headstarting and propagation at SLZ, collecting individuals from all sites to bolster genetic diversity. State-wide monitoring plan, propagation and release plan. EMR >80 tagged, new county record in Ottawa County. Writing a state-wide long-term monitoring and recovery plan for EMR. Kirtland's snake last recorded in '60s, also dusty hognose snake have protected status now, scarlet snake in sand prairie. A lot of chytrid testing—cave animals: grotto and cave salamanders and others. Over last 2 years, 3000 dead turtles of 4000 captures from catfish trapping--new trap modifications. Pond-breeding amphibian inventory work, NAAMP protocol. Trying to outlaw commercial turtle harvest. Ozark hellbenders likely listed by end of next year. Delisted western fox snakes from state endangered. A lot of year of the frog publicity at State Fair.

Nebraska: Omaha Zoo- year of the frog outreach. Chytrid testing from around the state. Discussing online methods for kids to identify herps with the zoo. May fund a herp atlas. Examining eastern tiger salamanders and *A. malvordium* status. Northern leopard frogs decreasing→replaced by Plains leopard frogs. Three spp of concern: EMR, Blandings, and timber rattlesnakes. No new listings. New field guide for NE in next year. NE game/parks commission trapping turtles for 5th year. Smooth softshells not found on channelized portions of MO river. Map turtles not found.

Ohio—(Greg Lipps): Blandings, Eastern fox snake, both softshells, eastern plains gartersnake, copperbelly, short-headed gartersnake, hellbenders, EMR, eastern spadefoot all being researched through the state. 1st Bd die off in Ohio of green and leopard frogs. Ground skink, queen snake, smooth green snake, cricket frog added to spp of special concern. Discussing changing turtle regulations. Ohio EPA using Amphibian index of biotic integrity for valuation of wetlands and buffer zones. Amphibians and reptiles of Ohio (book) in progress.

South Dakota (Brian Smith):: covering SD and North Dakota west of MO river. Completed state inventory of herps through natural heritage biologists as part of State Wildlife Action Plan. Turtle surveys completed, herp field guide for SD available. Inventory of Wind Cave Natl Park, Badlands Natl Park, Mt Rushmore and Jewel Cave Natl Monuments, Buffalo Gap Natl Grassland, Devil's Tower Natl Monument (extended spiny softshell turtle range to Devil's tower), Fort Laramie Natl historic site in WY, Knife River in ND. Steve Corn inventories in SD. Reptiles and amphibians of Black Hills survey- survey of sagebrush lizards, horned lizards, genetic work on smooth green snakes in Black Hills. No long-term ongoing funding for monitoring but conservation assessments for northern leopard frogs, milk snakes, tiger salamanders, and red-bellied snakes. No regulations on any herps in South Dakota. Dakota Amphibian and Reptile Network has 50-80 people—online network.

Wisconsin (Bob Hay): Approach to conservation for Blanchard's cricket frog- NRCS involvement to create opportunities for range expansion toward historic range. Strategic releases in southern part of the state. Climate change → decline in mild winters may allow rebuilding of populations in Wisconsin and Illinois. EMR work funded by USFWS last 10 years. Habitat management work through telemetry study and historic aerial photos— 1 population that may be sustainable in the state. Reversing canopy succession- gravid females and juvenile EMRs occupying newly opened-canopy habitat. Appear to have high adult mortality-- 1st year of long-term monitoring—will monitor every 3-5 years. New wood turtle program, environmental review program. Butler's gartersnake – agency is pressured politically and experts are no longer part of the regulatory process.

Saturday, September 6, 2008

9 AM: PARC regional products- where the rubber meets the road—Priya Nanjappa Mitchell

-After product stage there is still follow-up and refinement necessary
May need to water down scientific language to engage more stake holders
Climate change challenge- how can rankings be tied in to climate change?

So far:

-Habitat Management Guidelines (HMGs)- habitat loss challenge—recommendations and guidance, maximizing compatibility vs. ideal for land management with herpetofauna.

SE and NE HMGs available now, soon NW and MW available

-Inventory and Monitoring (I and M) handbook in review now:

http://www.parcplace.org/inventory_monitoring

rapid vs. comprehensive, species x technique table, peer-reviewed techniques, guidance for biologists and land managers

- Trainings: Habitat management and I and M—good for capacity building
- Educational/informational brochures- national in scale, regulatory guidelines, please don't turn it loose
- New in PARC: Amphibian and reptile subcommittee, technical experts, non-game chiefs www.wildlifeactionplans.org
- National Task Teams: Important herp areas (regional and state implementation), Roads Task Force- partner with transportation entities→ herp friendly road construction/placement, new development sub-group
- “RRTH”- (Relocation, Reintroduction, Translocation, and Headstarting) guidelines
- PARC strategic plan- completed and in layout- available soon
- 2009 marks 10 years of PARC—10 year publication: Regional and National accomplishments. Bob Brodman→ regional “herp happenings” newsletter
- Other regional products: backyard habitats, etc on website

Co-Chair election—Karen Kinkead new co-chair MW PARC

Working groups:

Turtle regulations- gather data across states in MW PARC
Raccoon control-guidance for agencies?
Turtle Races
Outreach/Education- additional partners
Roles of Nature Centers as sink for wildlife- husbandry issues and collection of interpretation/education animals

Updates

HMGs (Bruce Kingsbury): MW first HMG produced and 1st one reissued. Some more photo queries but should be done by end of the year. Still need courtesy review- all states and federal agencies will get a courtesy review

State Wildlife Action Plans (Carol Hall): Compiled list of herp spp in MW states wildlife action plans and their status. Worked up list of MW states' species in greatest need of conservation, contacted state representatives, species list, conservation actions and key habitats identified in plan for states that provided the information

Important Herp Areas (Karen Kinkead): The national committee is close to having a working document. PARC chapters have to take the lead in choosing appropriate areas - state/federal governments will not be able to designate these areas. System will work similar to the Audubon Import Bird Area Program.

2009 MW PARC Meeting in MI (Edi and David): Howell Nature/Conference Center, locations close to 3 airports, theme of collaboration, identifying hurdles, and how to overcome them. Set up panel discussion on problems with collaboration. Potentially earlier meeting? Late August? Meeting will be near George Reserve and Zoos. Scholarships for student attendance? Rachel and David collected donations for student scholarship attendance for PARC meeting. Suggestions for people/organizations for panel discussion. International Herp symposium will be in MI.

Silent Auction – record this year \$650!

Joint MW/NW meeting exploratory group: potentially meet in 2010 or 2011, try to dovetail meeting with JMIH in Minneapolis? Potential formation of Great Plains chapter of PARC

HMG and I/M trainings (Jeff Briggler): Amphibian/reptile conservation workshops in MO—25 staff for 3 days, ½ in field and ½ in classroom—trap techniques, habitat types, spp life history, needs and then discussion of management. Workshop was well received in MO DNR. Also 2-day stream team workshop, combo of HMG and I/M techniques.

Review NAAMP protocol and go to ponds with and w/o fish.

(Brian Smith SD): planning workshop through Black Hills State University- go visit agencies to do wkshps in fall

(Jennifer Anderson Cruz- IA)- NRCS staff could use wkshp to coordinate efforts but travel funds are shut down. NRCS has amphibian/reptile web training

(Priya)- train the trainers- bring in folks from various places so they can report back to their agencies and train others.

(Karen Kinkead)-We could use pre-packaged training modules- already have trainings associated w/general wetland/grassland/forest management.

11 A.M. –Task Teams

North American Amphibian Atlas (Gary Casper and Mike Lannoo)- will be looking for people to review it—climate vulnerability manuscript for herps in upper MW

MW State Wildlife Action Plan/Spp Ranking: discussed new RFP for SWG of \$ 5 million- requires interstate work—minimum of \$300,000 projects. Proposals due Nov 17. Possible stream restoration project in Driftless Area (WI, IL, IA, MN)

Going to apply NE PARC template to spp list to finalize rankings for MW

Raccoons group: subsidizing of raccoons by nature centers is huge problem- education and permitting facilities for nature centers need to be more stringent. Identify raccoons as nuisance spp, identify control measures, possible white paper on the issue, partner with ornithologists?, increase regulations on rehab and release on public lands, need mammalogists on board as well.

Education and outreach: Outreach to partners, compiled list of potential partners with new ideas/suggestions

Great Plains Group: Get core group interested in conservation issues in Great Plains. Have speakers and list of members—trial period as a subchapter of MW PARC before launching a Great Plains PARC