

Summary of Friday Discussions

Executive Summary:

The discussion groups on Friday were well attended by a broad range of professional and non-professional participants. The six questions listed below were used to frame the entire workshop (Thursday and Friday) as designated themes for the conference. Many of these themes were touched upon by speakers on Thursday morning and afternoon; allowing participants ample opportunity to think about the questions from multiple angles. Each workgroup was well attended and we gathered important feedback on a range of issues dealing with property-based monitoring and citizen-based initiatives and needs.

Similar to previous conferences, there is still an overwhelming need for support and guidance to identify monitoring needs on properties and linking managers and monitoring groups to proper protocols. This is not only a citizen-based monitoring need, as most managers of public and private land also expressed some version of this need at the recent monitoring summit and through the Wildlife Action Plan development. Recent work by USGS, USFWS (Refuges) and NPS may greatly inform this process in Wisconsin. This greater topic; creating a link between monitoring priorities, protocols, resources, and publication; was suggested as a potential conference theme for next year.

The other overwhelming theme from the conference was centered on the need for good communication throughout the monitoring process between the monitors or monitoring groups and the property managers. Many of the challenges to setting up and implementing a successful property-based monitoring program using citizen-monitors can be met by establishing clear expectations and objectives from the beginning of the process. Discussions centered around questions 3 and 5 give a nice summary of the reasons that citizens volunteer and their needs as volunteers. In addition it set forth a good set of principles for being a “good” citizen monitor. It was recognized in multiple discussion groups (including the quality control group) that proper training and re-training throughout the life of a project is very important. This probably could have been the subject of a lengthy discussion in and of itself.

In the coming months the Citizen-based Monitoring Network liason and ATRI staff will work to generate more feedback on these themes from non-represented groups, staff, etc. Following that process we will work to set out recommendations for products and projects to address the comments received during this process.

Stay tuned.....

1. What are the monitoring needs of managers on public and private properties?

Group Leader: Loren Ayers

Summary: This was a very broad discussion question for the group, and after wrestling with it for a while, they realized that they needed to redefine the question to read: How should we assess the property monitoring needs? Most of their time was spent discussing a process by which they could potentially answer the original question of what the monitoring needs are on public and private properties. This group acknowledged that different properties will have different monitoring needs based on local and regional conservation and legal/enforcement objectives. They stressed the importance of assimilating existing planning information at these sites and within the larger region (Wildlife Action Plan) and using this to set monitoring objectives (needs). Future efforts through the WAP, CBM Network and other monitoring efforts should work to develop a process by which local managers (private and public) can clearly determine their conservation objectives and link monitoring protocols/programs with those objectives.

Actual Notes:

✓ Redefined the question to read: How should we Assess the property monitoring needs?

1. Property Type divisions/stratification
 - a. Current Information
 - b. Existing management plan – (make more readily available NGOs looking at EcoAtlas/for them!!)
 - c. Current use
 - d. “Needs” list for region, property. Existing conditions web interface for one stop assessment of opportunities.
2. Land manager survey /agency/organization survey
3. Property needs vs. Large-scale context
 - a. Private property, Public property, State, Region, species and habitat distribution
4. 3 levels of question
 - a. Baseline/context
 - b. Targeted
 - c. Research/enforcement-legal
5. Look at all the exiting plans property through continental. What is the “standard list” of minimum questions and variables – common parameters across properties?

- a. Have others gone through prioritization?
- b. “ “ standardization of protocols?
- c. “” assimilation of data?

6. We need a process flow chart to lead to protocols, methods, data, people
 - a. USGS Managers Monitoring manual
 - b. Natureserve process

- ✓ What basic information is needed?
- ✓ Where are the most relevant/best protocols?
- ✓ 2007 Conference Theme: Questions & Protocols & Reporting

2. From recreation to enforcement: Where do citizen monitors fit in?

Group Leader: Peter Murray

Summary: The goal of this discussion group was to gain some insight and consensus on what types of monitoring objectives/programs citizens could handle. Traditionally citizen monitoring groups have focused on natural history programs (weather, plants, birds, bugs, etc.) but as the success of those programs have gained notoriety other sorts of objectives become possible such as monitoring recreational usage of an area or even monitoring compliance with different regulations.

Because of the contentious nature of enforcement and monitoring the group focused much of its time on that side of the issue. The group emphasized that if DNR or other agencies want citizens to monitor compliance with regulations then citizens need to have a clear understanding of the data collection process and proper training to ensure that their observations will hold up in legal situations. The group also acknowledged that this sort of monitoring might attract an altogether different citizen with different motivations from one doing a bird survey, etc. What the group was unclear about was whether citizens should be expected to intercede or simply report violations to the proper authorities. As citizen groups expand in and around properties of interest (lakes, rivers, wildlife areas, state parks, etc.) engaging all partners in this discussion could be very valuable to both the resource and the agencies charged with managing the resource.

Actual Notes:

- ✓ People see things the more they're out

- ✓ People need to understand process to using data
 - Why data needs to be standardized
 - Contentious situations – volunteers will be asked to testify

- ✓ Need training/communication in reporting violations
 - Pictures
 - Notes
 - Chain of custody – possible?

- ✓ Motivations for monitoring different (reactionary vs. pro-active)

- ✓ DNR should ask monitors to check for violations; or should they? – reporting only?
 - Integrating public into the “public trust”

- ✓ How do we deal with anonymous reporting?

- ✓ We need advocates!
 - Neighborhood watch as a model

- ✓ Interceding is a problem for monitors
- ✓ Monitoring violations vs. seeing violations while monitoring
- ✓ Does general public know when a permit is required?
 - Possible danger to monitors
 - Who do I call?
 - Bad behavior vs. regulations?

3. What can volunteers do to ensure that their efforts are incorporated into management decisions?

Group Leader: Jeff Bode

Summary: To quote Noel Cutright (speaker at the conference) “Communication, communication, communication”! That theme was very prominent in this group discussion. The group felt that it was important for the citizen monitors/group to communicate early and often with property managers in order to determine what monitoring opportunities exist on the property and how their results would be used for future management. The group felt that data was more likely to be used if it was collected in a professional manner and the volunteers followed protocols and attended training sessions, etc. to ensure a quality effort.

The group also felt that it was important to advertise or communicate the survey results in either “workshops” or forums/newsletters, etc. to let others know about their work and the impact it’s making on the ground.

Actual Notes:

- ✓ Communication
 - Keep in contact with manager and park staff.
 - Ask for a final report or a summary, and then follow with questions about outcomes.
 - Have conversations with managers to find out how monitoring efforts are incorporated into management activities.
 - Our friends group writes a quarterly newsletter which is sent to all members. This provides everyone with direction and knowledge of what’s being done and how they can contribute.

- ✓ Be a “good” volunteer
 - A volunteer can:
 - ✓ Be persistent, enthusiastic, and passionate
 - ✓ Attend workshops, training, become a citizen-scientist
 - ✓ Learn the tools and techniques for successful property monitoring.
 - ✓ Be patient yet persistent.

- ✓ Follow protocols precisely
 - A volunteer can be as precise as possible and follow all protocols in order to provide accurate information and ask questions when they have them.
 - Enter and quality assure data in a spreadsheet within a database.
 - Maintain a high degree of competency, professionalism, and integrity in collecting their data.

Additional Notes:

- ✓ Ask the property manager what monitoring needs are for the property and if there is an opportunity for them.
- ✓ Talk with the manager ahead of time about how this data will be used on the property.

4. How do we ensure quality data? Is certification the right answer?

Group Leader: Kris Stepenuck

Summary: This group had a very spirited and informative discussion covering most of the considerations for moving forward with certification programs to ensure quality data. Presumably because certification is a hot issue, the group spent most of its time discussing the pros and cons of certification. I took that to mean that most partners agreed that quality data was important and necessary. However; participants did make a point of suggesting that based on the objectives of the property-based monitoring system, certification may not always be the answer as it can work against overall participation levels. There were many cautionary points made about certification: it will reduce participation, it needs to be managed like any other system, people have different learning styles, etc. Most of the group felt as though certification programs should be more than just certification, but a conduit to training and offer various levels of entry into the program (beginner through expert). In the end program managers need to be explicit about the level of quality assurance they need to meet their program goals and assess the proper training and potentially certification needed to meet those goals. Communication and understanding between program/property managers and citizens early on will go a long way to resolving long-term problems or roadblocks.

Group Summary: Programs need to decide if certification is needed for their planned data uses. Things that can help with certification include: offer lots of training and refresher training, written methods, checklists, online training, etc. Start with orientation – let people self select based on program description/needs/expectations. If you decide that you need certification based on your data uses, that will require some work: define criteria, manage people's activities, keep organized (need database). Be aware that it will lead to less data if certified than if not!

Actual Notes:

- ✓ Don't make getting certified to monitor a hurdle to getting started. Takes time for citizens to learn the methods, so it could intimidate people to be tested for certification right from the start.
- ✓ Allow people to do it for a while to get to know methods and practice.
- ✓ Need a database to know where people are at and what they've been involved with (in terms of what training they have received, how much monitoring they have done since training, any refresher training they have had, etc.). Accessible list to all so everyone (e.g., citizen monitoring program coordinators) could access to find others to help them.
- ✓ So certification is not out of the question, but would need a lot of work to have it happen well/stay organized over time. A programmed database of participants, their training, etc. would help with this process. Allows for varying levels of citizens.
- ✓ Experience should count towards certification.

- ✓ Have written methods – have checklist.
- ✓ DVD training is nice, but it follow up training is essential.
- ✓ Funding for enough proper equipment so each person has their own set.
- ✓ Timing and sharing equipment was difficult.
- ✓ Need good, working equipment for all.
- ✓ People get more comfortable over time so you can add parameters at that time- don't start with too much.
- ✓ Pair people to help them learn.
- ✓ Observational monitoring – e.g. b4/after rain storms
- ✓ Difficult for people to enter data via computer – can be intimidating – easier to mail in.
 - In the training have a component be using the database. Could have local run this training too.

- ✓ Under certain circumstances cert. would be important.
 - Less time to keep track of where people are at than to recheck all people's macro ids.

- ✓ Add online training components to help build people up to being certified. The technology is available.
 - Could download to ipods for local area/region.
 - Deliver content online thru. Ppt and follow up with a quiz – building towards certification.
 - May not work for all learning styles, could do streaming video.

- ✓ Or digital recognition – people take photos and submit – digital photo recognition to decide what an organism is.
 - Would take another level of training and protocols.

- ✓ Criteria to certify people will be hard to establish.
- ✓ Takes a lot of work to keep track of who is at what stage (if people turn in “resumes” and aren't qualified immediately, lots of time to keep track of where people are at.)
- ✓ Legislature got involved – people complained no criteria.
- ✓ Certification might scare people away if it's too daunting (e.g. bird certification).
 - People fear not being smart enough to pass.

- ✓ Who will manage the certification program?
- ✓ Why not record years of participation towards a certification? (rather than starting with certification at 1st training. Working the way up so to speak! This allows novices to participate.
- ✓ Need QA testing of different methods looking at needs for increased complexity and training.
- ✓ Isn't necessarily true that we need the more expensive equipment? Need comparison tests!

- ✓ Citizens are eyes and ears and if see problem, tell DNR and DNR does follow up with more expensive equipment.
- ✓ Expand citizen monitoring to habitat assessment – buffer strips; make buffer initiative linkages.
- ✓ Questionable response bias – to weed out bad information. Have algorithms accessible to weed out outliers. Need a process to validate the data. Could be scientist checking before writing it up.
- ✓ Look to other states to see what they have done before doing anything here.
- ✓ Scan samples: there are dual scanners available, or field scanner.
- ✓ Online or remote training – possibly use the tech schools.
- ✓ A lot will require hands on training, so maybe computer/video not the way to go.
 - Learning style matters as does the need to actually try the method. Most questions don't come until someone tries it!

- ✓ Could do orientation via video as introduction so people come to training already prepared for what to expect.
- ✓ Important to remember that not all monitoring projects need certification.
- ✓ More data able to be collected that are suspect and less that are certified – programs need to decide what they need for data.
- ✓ Program(s) need to decide what level of data is needed – what is the use of data going to be? Sometimes certification is needed, sometimes not.
- ✓ The harder the certification process, the fewer the number of people who will complete the process.
- ✓ Orientation/pre-screening may be necessary (eyesight, hearing, scuba, etc.). People can decide for themselves and know what's expected.

5. How do we engage citizens in property-based monitoring? Training, trainers and leaders!

Group Leader: Jeremy Solin

Summary: See the first two bullets below for a concise summary of this group's discussion...I couldn't say it better myself.

Actual Notes:

- ✓ "6 Reasons" for volunteering
- ✓ Design of monitoring program
 - Recognize reasons for volunteering.
 - Develop focused goal.
 - Provide varying levels of commitment (events, ongoing, individual)
 - Provide "value-added" opportunities (education and training)
 - Build on sense of place and special interests.
 - Communicate opportunities
 - Recognize efforts
 - Show progress and use of information: consistent feedback.

- ✓ Build a statewide Earth Watch type program: "Wisconsin Conservation Corps."
- ✓ Recruitment: fun educational event to begin with – Annual Festival/Open House.
- ✓ Connect with teachers and students and student organizations.
 - Build into curriculum
 - Extend to families

- ✓ Connect with user groups and with their resource use.
- ✓ Focus on kids and bring along their parents.
- ✓ Communication
- ✓ Survey potential volunteers about their interests and needs.
- ✓ Marketing – let people know about the opportunities.
- ✓ Provide education with monitoring
- ✓ Recognition

- ✓ Annual Lake Cleanup
 - annual event – 1st event of the season.
 - camaraderie
 - concise
 - impacts are visible
 - provide goodies
 - spiritual nourishment

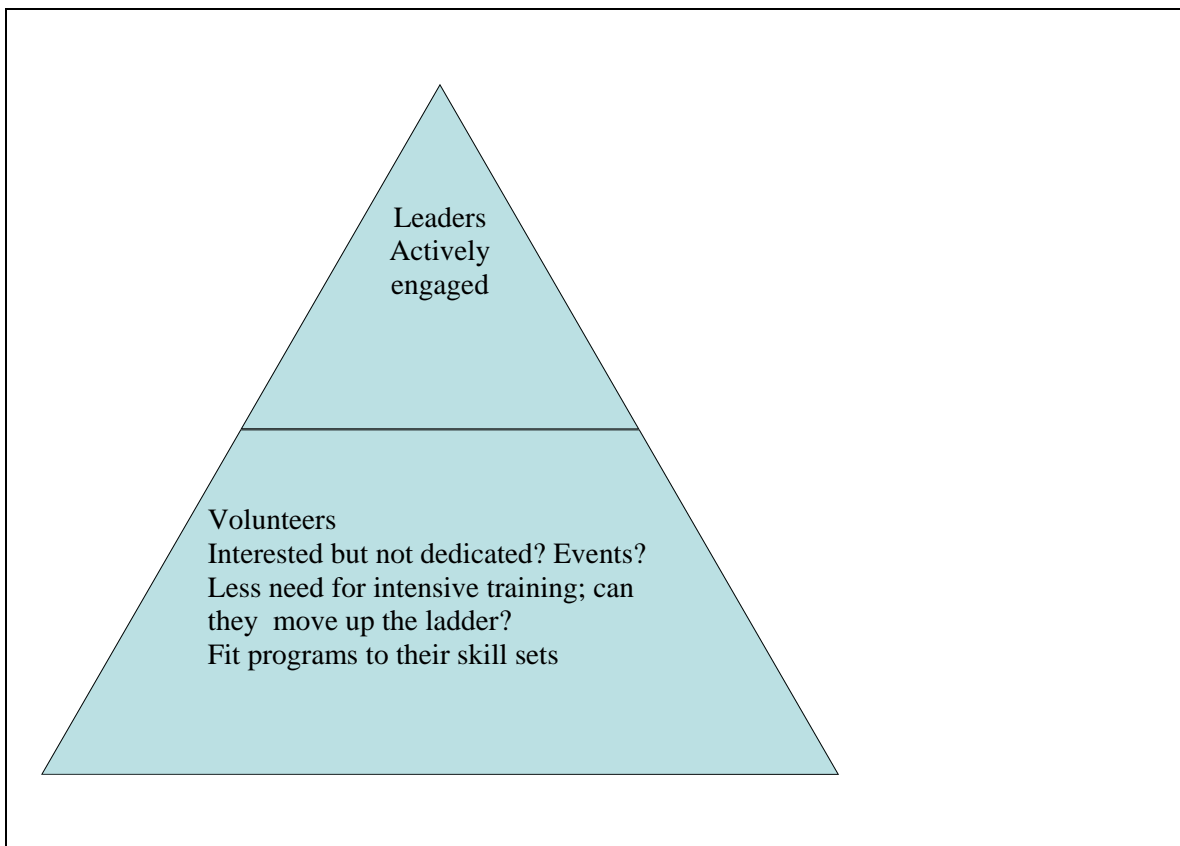
- ✓ Organization with clear mission and connection to place.
 - focused goal
 - monitoring teams
 - understand volunteer limitations and time commitment
 - training/education programs with volunteer requirements
 - varied commitment levels (start small!)

6. Volunteers vs. Citizen-scientists: How do we support the full breadth of citizen needs?

Group Leader: Andy Paulios

Summary: This group spent most of its time wrestling with the dichotomy put forth in the original question and constructing the model (useful?) seen below.

Actual Notes:



- ✓ Much of our time was spent discussing the juxtaposition offered by the question and recognizing the differences between the two.
- ✓ Volunteers were seen as individuals or groups who were interested in doing some monitoring that a property manager would set up but not willing to devote a lot of time to the project or expertise. They were seen as entry level citizen-based monitors in the pyramid above.
- ✓ Citizen Scientists were seen as individuals or groups who had a strong sense of place, were actively engaged in assisting property managers with monitoring needs/questions or were constructing monitoring questions of their own.
- ✓ The pyramid was set up to represent both the varying levels of “citizen-based monitors” as well as the varying levels of commitment and strategies that

different monitoring program managers or property managers might need to address.

- ✓ Where does the effort go from a training perspective? Are we overlooking folks? Beaver Creek Reserve's audience might lie on a different position on the pyramid than that of the Odonate Survey? Each program (eBird, naturemapping, etc.) needs to recognize the differences in its target audience and tap into a CBM network to make it's program more effective.
- ✓ Need for a networking resource.
- ✓ There are many opportunities to move up the ladder. Support this when it happens.
- ✓ Communication early and often is important!
- ✓ We're creating a monster! There are some property managers/program managers who may feel as if they're creating a monster by moving groups/individuals up the ladder. There's a perception from both outside and inside DNR that it would create too much of a workload.
- ✓ Other in DNR felt that it's great to create the monster and act more as a resource to those groups rather than leading them all the time. The analogy was put forth that DNR doesn't lie on top of the pyramid, rather they are on tap for when expertise is needed.
- ✓ St. Croix Watershed Group felt as though a watershed approach with "guidance" from the DNR was a better model than taking a stream by stream approach and having DNR tell them what was most needed.
- ✓ Need more support for NGOs/outside groups to manage volunteers (capacity building).
- ✓ Where is the need for more effort? How do we enlarge the triangle? How do all the partners fit in?