The Monitor

A Quarterly Newsletter of the National Capital Region's Inventory and Monitoring Program

Meeting of the Networks 3rd Annual I&M Meeting was a Success

The National Capital Region Network (NCRN) was selected earlier this year to host the Third Annual "Meeting of the Inventory and Monitoring Networks". The meeting was held August 18-22 at the National Conference Center in Lansdowne, Virginia. More than 100 people from the National Park Service, US Geological Survey and research institutions attended to learn more about the current status of the program and to provide input for the program's future direction.

The main focus of the annual meeting was to provide a general overview of the history and current status of the program for new staff and to provide a forum for information exchange between the networks. The NCRN is just one of 32 networks nationwide tasked with developing a long-term ecosystem monitoring program. The annual meeting brought the networks together so that they could discuss their different approaches to developing a monitoring program and could then share and learn from each other's successes and failures. Several panel discussions and an evening poster session were scheduled into the meeting to achieve this goal.

The annual meeting also provided nationallevel Inventory and Monitoring (I&M) staff the opportunity to update networks as to the latest status of the nationwide inventory initiatives, such as soils and vegetation mapping, and to make them aware of new products coming out of the I&M Program. The networks were also



Dr. Michael Soukup, Associate Director, Natural Resource Stewardship and Science, addresses participants during a session of the 2003 Annual Inventory and Monitoring Meeting

given the opportunity to provide suggestions for other products they'd like to see developed and for the direction they would like to see the I&M Program take.

On a special note, Marcus Koenen, the NCRN Network Coordinator, was presented with an award for Outstanding Achievement by a Network Coordinator from Associate Director Mike Soukup. We're all very proud to congratulate Marcus on his achievement.

For those who would like to read more about the "Meeting of the Networks" or the I&M Program, information can be found at the national Inventory and Monitoring web site:

http://science.nature.nps.gov/im/index.htm

Coordinator's Corner

By Dr. Jim Sherald Chief, Natural Resources and Science

Natural Resource Year in Review

As I am sure you are aware, the National Park Service has just published the "Natural Resource Year in Review -2002." This publication highlights items of significant interest concerning natural resource stewardship and science in the National Park System. Although many people view the National Capital Region's (NCR) parks as more cultural than natural resource oriented, our parks do have significant natural resources that face many pressures associated with urbanization. With that said, it is a strong testament to the quality of our regional and park staff that five articles in this year's publication highlight our region's natural resources and stewardship.

Of the five articles in this year's publication, two were submitted by the regional Inventory and Monitoring (I&M) Program, and the other three were submitted by park staff. The I&M Program's articles were titled "National Capital Region Network: A milestone in the making" and "Volunteers vital in completing National Capital Region bird inventories." The first highlights the continued progress of the monitoring program, and the second discusses the benefits of utilizing citizen scientists. In addition, National Capital Parks - East biologist, Brent Steury, had an article published, "Small parks, big biodiversity," that again confirmed the value of small natural areas to a region's overall biodiversity. Catoctin Mountain Park resource manager, Jim Voigt, published an article, "Restoring our native dogwood," that discusses the planting of "Appalachian Spring," a flowering dogwood cultivar that originated in Catoctin and has been found to be resistant to dogwood anthracnose. The fifth article was submitted by Gopaul Noojibail, of National Capital Parks - Central, and was titled "Creating pollinator-

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Baby Steps to a Full Strut: I&M Takes on Protocol Development

"51 vital signs down to seven..." was where we left our readers concerning the status and direction of the National Capital Region Network Inventory and Monitoring (I&M) Program in the last issue of "The Monitor." But, to refresh your memory, the I&M Program was faced with 51 priority vital signs that, when monitored, could provide an early warning of environmental change within the parks' natural resources. Upon further review of those 51 vital signs, the I&M Program staff determined that many of the vital signs could be grouped together by monitoring method. Therefore, developing several general monitoring protocols could address numerous vital signs. In fact, the I&M Program has taken initial steps to begin or contract out protocol development for: remote sensing, RT&E, vegetation, water, and wildlife.

You may be asking yourself, what is in a protocol, and why is so much time being devoted to the development of these documents. Simply put, a protocol provides the roadmap of how to conduct the monitoring and provides for consistency over time. Even if monitoring personnel changes, a well-written protocol

will ensure data is comparable. To help simplify the development of the monitoring protocols, the I&M Program is following a standard set of guidelines. The guidelines provide recommended content for inclusion in the protocol narrative, and include background and objectives, sampling design, field methodology, data handling, analysis and reporting, personnel requirements and training, operational requirements, and a list of references. Using these guidelines will ensure that all protocols discuss the same topics no matter who authors the document. Furthermore, after each protocol has been developed, it will be peer-reviewed to provide a level of scientific credibility to our monitoring program.

Protocol development will be a key to the success of our monitoring program.

Although modifications to protocols may occur during the first few years of monitoring implementation, the initial protocol should provide the framework for all future monitoring efforts concerning the subject area.



Aquatic Insects Provide Insight into Water Quality

Some readers of "The Monitor" may be given the impression that the National Park Service (NPS) is not currently conducting any natural resource monitoring because of all the articles concerning the planning of our monitoring program. However, this is not true. Many monitoring programs began prior to the Inventory and Monitoring Program's existence and provide valuable information. The water quality assessment program at Wolf Trap National Park for the Performing Arts (WOTR) is one such program.

NPS staff along with the Audubon
Naturalist Society began a project in the
fall of 1998 to begin developing an
effective water quality sampling program
for the National Capital Region. The
project was designed to compare the insect
populations of WOTR streams with
Quantico Creek, a healthy stream that
shares similar geographic properties and
should have similar insect populations.
Quantico Creek lies within the boundaries
of Prince William Forest Park and is



Wolf Trap Creek, Vienna, Virginia

minimally affected by urban land use. Comparing the insect populations of these two streams can allow for an interpretation of how WOTR streams are affected by urban land use.

Four years of survey data shows that WOTR streams exhibit some degree of degradation when compared to Quantico Creek. To determine specific causes of the degradation would require a more extensive study, but preliminary results suggest that organic pollution combined with heavy frequent run-off from urban areas are significant contributors to the conditions of the streams and the differences in the insect populations. The findings support the general observations that widespread urban development seriously degrades macroinvertebrate populations in both quantity and quality. The monitoring results indicate that although WOTR streams are in fair health for urban streams, they are degraded compared to a stream like Quantico Creek.

If you would like more information concerning the ongoing water quality monitoring program at WOTR, please contact the Regional Hydrologist at National Park Service, 4598 MacArthur Blvd, NW, Washington, DC 20007.

NPSpecies Becomes More than a Species List

Are you tired of looking in NPSpecies (the National Park Service's (NPS) species database) and being unsure about some of the data? Have you wondered if anyone has been updating the information, or if anyone has attempted to verify if the information is correct? Well, I have some answers to those questions and others, but let me start at the beginning.

For some time, the Inventory and Monitoring (I&M) Program has been entering species-related information into NPSpecies. The data, concerning a particular species at a particular park, comes from a variety of sources, including published papers, reports, voucher specimens, and observations. With this information, NPS staff could create a list of the species that have been documented to occur in their

park, but little else.

A goal of the I&M Program is to conduct quality control and assurance procedures on the information within NPSpecies to verify the data's credibility. The I&M Program refers to this procedure as "data certification," and it simply means that an individual with knowledge of a particular taxonomic group and park has reviewed the data and confirmed the information is correct to the best of their knowledge. This process will be repeated over time to keep the information relevant. However, individuals using the database will also be able to view the last date the data was "certified" and make their own assumptions as to the current relevancy.

So, that is the background, but I am sure you would like me to answer

your questions. The National Capital Region parks have just completed the "data certification" for birds. Park representatives, along with Regional and National I&M staff, conducted a threeday workshop and reviewed each park's bird related information. Therefore, when you look at the bird-related data in NPSpecies, you can get more specific information, including the species status (present, probably present, unconfirmed, historic, etc.), abundance (abundant, common, rare, etc.), residency (park breeder, migrant, etc.), and nativity (native, non-native, etc.). NPSpecies also links synonym names within the database so that each species shows up under one scientific name.

The "certified" bird data will soon become available on-line for your

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"The Monitor" is a quarterly newsletter of the National Capital Region's Inventory and Monitoring Program.

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Coordinator's Corner

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friendly plant communities in an urban park." The article discusses the restoration of native plant communities along the East Potomac Golf Course and the significant natural and interpretive benefits of the project.

All five articles demonstrate the outstanding natural resource stewardship that is ongoing within the NCR. If you have not had a chance to read these articles or any of the "Natural Resource Year in Review," I encourage you to do so.

NPSpecies...(continued from p.3)

park to use, and we will continue to work towards the "data certification" of other taxonomic groups. The "certification" process took a lot of time and effort, so we hope you will utilize all of NPSpecies' capabilities, and not just use it as a species list source.

The Changing Faces of I&M

The National Capital Region Inventory and Monitoring (NCR I&M) Program is undergoing significant personnel changes. As you recall, Regional Coordinator, Dr. Ellen Gray, left in October of 2002, and recently, Dr. Christina Wright, the Data Manger, departed for a similar position with the Southeast Coast Network in Atlanta. Now we are faced with the imminent departure of John Sinclair, our Inventory Coordinator. John has accepted a position with the Animal Plant and Health Inspection Service and will begin his new position on September 22. As has been frequently mentioned, the NCR I&M Program has set a high standard, and Ellen, Christina and John, along with the rest of the team, should be very proud of their contribution. Hopefully, we will be able to fill all of these vacancies soon and maintain our pace and progress.