

Data Quest: The Research Begins

Rich Leopold – IOWATER Coordinator

As cold weather descends upon us, most IOWATER monitors have "packed it in" for the winter. It's a good time for reflecting on the season passed, and looking forward to next year and what it might bring. Another thought nagging many monitors: "I should probably submit my data to the IOWATER database."

YES, YOU SHOULD! I find it funny when I see friends from across the state and the first thing they say is, "Uh, sorry, but I haven't submitted my data yet." I'm not chastising - well, maybe a little - rather I'm asking, if you are willing, to please submit your data as soon as possible.

The reasons are many. Submitting data will ensure there is a permanent record for generations to come. It adds credibility to your efforts. In speaking with many of you, I am well aware of the valuable time and effort you are contributing to IOWATER. The state of Iowa (including myself) would like to **THANK YOU**. We will be using your data.

That leads me to the final reason, and the one that's prompted me to write this article. My master's research proposal and thesis with Iowa State University includes the critical evaluation of the IOWATER program and the resulting data. The following except is from the "Problem and Significance" portion of my proposed research.

IOWA CITIZEN MONITOR

VOLUME 3:1

Winter 2002



"Historically, little data exists about the quality of lowa's streams, rivers and lakes. State and federal agencies are seeking monitoring information on surface water quality to address regulatory compliance to the Clean Water Act. Local policy makers and public conservation coalitions are increasingly focusing attention on the ecological health of surface waters to address human health concerns, economic issues such as tourism, and land-use issues such as confined animal feeding operations and agricultural chemical use.

"Public staffing and funding to address these concerns have not kept up with the need. To fill this information gap, many state agencies across the United States have organized programs that train local citizens to monitor the quality of surface waters as a cost-effective means to supplement professional efforts. Citizen data has been used in many states to generate a baseline of useful information that might have otherwise gone unmonitored.

(Continued on Page 2)



(Continued from Page 1)

"In 1998, the State of Iowa created a more comprehensive professional ambient monitoring program to address Clean Water Act regulatory compliance. Also in 1998, a statewide volunteer water quality monitoring program, coined IOWATER, was conceived. One of the purposes of IOWATER is to provide supplemental data to fill some of the "gaps" in information. There is concern among data users in Iowa as to credibility of IOWATER data. Similar concerns have been addressed in numerous articles showing volunteers are contributing credible water quality data across the United States.

"The question posed by this research is whether IOWATER is contributing credible data to Iowa's professional Ambient Monitoring Program. This will be evaluated by comparing existing data sets contributed by IOWATER monitors to similarly measured parameters contributed by professional limnologists and by constructing test models using IOWATER monitors and professional limnologists in monitoring and sampling comparisons."

Hopefully, you can see that this research will become a very valuable tool in our efforts "to protect and improve lowa's water quality…" (IOWATER's mission).

I'll ask for your data using whatever tactics I need to use. The Midwest guilt ethic works for some ("Don't you have something you need to do?") For others, it's ego ("You will considered a much brighter person if you submit data, and probably better looking too!"). For yet others, it is blatant pleading and begging (Please, pretty please?!?).

Seriously, the more data I have in the database when I begin this research, the better data set I have to work with. You will be contributing in bringing this important research forward and to bear on lowa's decision makers. Thank you for what you do, it is making a difference!

www.iowater.net

Net Notes

Lynette Seigley - Research Geologist

IOWATER map server back online. By the time you receive this newsletter, the IOWATER map server will be back online. Changes made will minimize future disruptions to the map server.

Can more than one person monitor the same location? Yes. You can register a monitoring site anywhere you want, even if someone else has registered a site at approximately the same location. The sites will be distinguished by their unique site number.

Can two people share a monitoring site and both submit data for it? Yes. If you and a friend are sharing collection of data from one site and both want to be able to enter data for that site, contact Lynette. Both you and your friend will be assigned a new IOWATER ID and password that will be shared. With this ID and password, you will both be able to submit data for shared sites.

Update on Sites Registered/Data Submitted. As of January 10, 777 sites in 86 counties have been registered in the IOWATER database. A total of 767 biological, 1,918 chemical/physical, 578 habitat, and 148 photographic records have been submitted.

If you have questions or need help using the IOWATER database, contact Lynette Seigley at (319) 335-1598 or Iseigley@igsb.uiowa.edu. We welcome any suggestions or comments you have for improving the database.



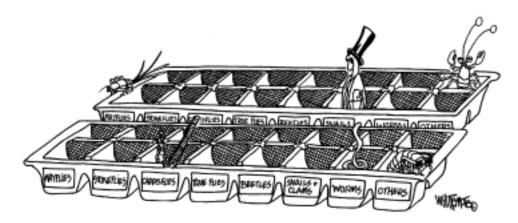
IOWATER 2002 Level I Workshop Dates

Ten new Level 1 workshops have been scheduled for summer 2002.

To attend one of the following workshops, please contact the person listed for that workshop.

Date	City/County	Contact	Phone	E-mail
April 19-20	Quad Cities	Gary Lomax	(309) 782-6167 (319) 359-6446	7 hqqkup@aol.com 3
June 7-8	Ames	Jerry Keys	(515) 232-2516	6 jkeys@storycounty.com
June 12-13	lowa Falls	Marcus Mueller	(641) 648-3463	3 mamueller@heartlandpork.com
June 25-26	Wapello Co.	Michele Keifenheim	(641) 682-309	1
June 28-29	Spencer	Julie Sievers	(712) 262-417	7 julie.sievers@dnr.state.ia.us
July 2-3	Osage	Jim Doidge	(641) 732-5204	1 mccb@osage.net
July 8-9	Adams Co.	Bob Waters	(641) 322-3116	6 bob.waters@ia.usda.gov
July 12-13	Peosta	Bob Walton	(563) 556-6745	5
August 2-3	Des Moines	Heidi Anderson	(515) 323-5360) handers@co.polk.ia.us
August 9-10	Muscatine	Dave Bakke	(563) 264-5922	2 dbakke@co.muscatine.ia.us

IOWATER – Making Waves of Difference Across Iowa – JOIN US!



IOWATER Level 2 Workshops

Commitment and caring for our natural resource . . . taken to the next Level!

To attend any of the Level 2 trainings, you must have attended a Level 1 workshop. You may then attend Level 2 trainings in any order. It's a "menu" approach, please feel free to attend whichever you choose to. The trainings described below include the Level 2 Workshop (8 hours) and the five Level 2 Modules. All modules are 4 hours in length except for the Secondary Educators Module, which is five hours.

An IOWATER Citizen Monitor will be certified as Level 2 trained upon completion of the Level 2 Workshop and at least one Level 2 module.

Level 2 Workshops. This training session will include specific help on designing a monitoring program, an introduction to Quality Assurance Project Plans (QAPP), and methods for interpreting collected data. Additional monitoring includes chloride and general coliform and *E. coli* bacteria (types of bacteria present in the intestinal tract of warm-blooded animals). Participants will construct a homemade "incubator" to take home and culture bacteria samples.

Benthic Macroinvertebrate Indexing Module. We will identify and count the critters to order and aquatic insects to family. These techniques will give us the ability to use "**metrics**," or data summaries, to further assess the health of our waters.

Standing Waters Module (Lakes, Ponds, and Wetlands). Many of the monitoring tests used at Level 1 stream monitoring have been adapted for standing waters, in addition to parameters such as water clarity (using a secchi disk), water color characterization, and aquatic plant identification. This module also serves as an educational program to learn about standing water ecosystems.

Soils Module. This module focuses on the ecological health of our soils. We accomplish this through indicators such as soil infiltration, soil chemistry, and stability of soil aggregates to wetting. This will be useful in spotting problem areas and trends and building an understanding of our soil and how it impacts water quality.

NEW FOR 2002!

Water Ecology Module. IOWATER volunteers collect plenty of data, but sometimes it is beneficial to gain an understanding of the complete world around you. This interpretive module will explain the principals of the ecology of water in lowa. Topics will include stream hydrology, water food webs, and watershed/non-point pollution sources and solutions. Demonstrations will be provided.

Secondary Educators Module. This module will investigate ways to bring IOWATER to the classroom. Activities from Project WILD Aquatic, Project WET, River of Words, and others will be "tailored" to work with IOWATER in addition to "ready-to-use" classroom materials. Educators will soon be able to earn continuing education credits (CEUs) or graduate credit when they attend this module; more details will be available in the spring newsletter.

IOWATER Level 2 Workshops and Modules Registration Form

The workshop registration fee is \$25 for Level 2 workshops and \$10 for each of the modules. This covers all program fees, meals, and testing equipment. To register for any of these IOWATER workshops, please fill out and send in this registration form. You will be sent confirmation, maps, and more info when paid registrations are received. Checks should be made payable to IOWATER.

:				
	eet or PO Box	City State Zip Code (Evening)		
ss:				
	0	Organization:		
Sept. 21	8 a.m. – 12 noon	Fossil and Prairie Center, Rockford		
naary Eau June 28	cators Module 5 – 9 p.m.	Nahant Marsh Educational Field Station, Davenp		
	ootone Madula			
Sept. 21	1 – 5 p.m.	Fossil and Prairie Center, Rockford		
Aug. 10	1 – 5 p.m.	Springbrook Conservation Ed. Center, Guthrie Ce		
r Ecology I July 13	1 – 5 p.m.	Starr's Cave Nature Center, Burlington		
r Egglogy	Modulo			
Aug. 31	8 a.m. – 12 noon	Iowa Lakeside Laboratory, Milford		
June 22	8 a.m. – 12 noon	Rathbun Regional Water Association, Centerville		
June 8	1 – 5 p.m.	Rock Creek Lake State Park, Kellogg		
ding Water	s Module			
Aug. 24	8 a.m. – 12 noon	Bailey's Ford Park, Manchester		
June 22	1 – 5 p.m.	Rathbun Regional Water Association, Centerville		
June 14	5 – 9 p.m.	Dorothy Pecaut Nature Center, Sioux City		
Module				
Aug. 31	1 – 5 p.m.	Iowa Lakeside Laboratory, Milford		
Aug. 24	1 – 5 p.m.	Bailey's Ford Park, Manchester		
Aug. 10	8 a.m. – 12 noon	Springbrook Conservation Ed. Center, Guthrie Co		
July 13	8 a.m. – 12 noon	Starr's Cave Nature Center, Burlington		
nic Macroi	nvertebrate Module			
rag. 17	o u.m. 1.00 p.m.	Transman Roberto Hataro Contor, Codar Fallo		
Aug. 17	8 a.m. – 4:30 p.m. 8 a.m. – 4:30 p.m.	Hartman Reserve Nature Center, Cedar Falls		
June 15 June 29	8 a.m. – 4:30 p.m.	Dorothy Pecaut Nature Center, Sioux City Nahant Marsh Educational Field Station, Davenp		

lowa DNR - Wallace Office Bldg.

502 East 9th Street Des Moines, IA 50319

Setting the Rules

Rich Leopold - IOWATER Coordinator

In the spring of 2001, the lowa legislature passed a law (SF 2371) requiring that the lowa Department of Natural Resources create rules to define "Qualified Volunteer" and "Credible Data" in relationship to water-quality monitoring. This was done in response to concern from certain sectors of the lowa population that volunteer-generated data would be used to excessively expand the state's "Impaired Waters" list (the 303d list required under the federal Clean Water Act), create unfavorable public opinion, and add to governmental overburdening.

Throughout 2001, a team of Iowa DNR staff have worked on drafting such rules. The rules have already been reviewed by the Environmental Protection Commission and are now released for public review. You may view the rules at our Web site, www.iowater.net. Go to "Proposed Qualified Volunteer Rules."

There are two ways to make your voice heard on this issue if you are interested. One is in the form of written comments which **must be received by MARCH 7.** Send To:

Rich Leopold – IOWATER lowa Dept. of Natural Resources Wallace Office Bldg, 502 E. 9th Street Des Moines, IA 50319

The second method for input is to attend one of three public meetings being held on this subject:

- February 27, 10:00 a.m.
 Wallace State Office Building, Rm. 5E
 502 E. 9th Street, Des Moines
- March 1, 7:00 p.m.
 Iowa Lakes Community College
 1900 North Grand Avenue, Spencer

 March 7, 6:00 p.m.
 Grant Wood Area Education Agency 4401 6th Street SW, Cedar Rapids

After this public review and procedural requirements, these rules should be in place by late spring of 2002. It should be noted that the original concerns of the volunteer-generated data have so far proven to be false. Federal, state and local natural resources professionals use the data contributed by citizens and consider it extremely valuable.



IOWATER Action!

Monitors in the Water

Here were some events and/or press releases organized by IOWATER monitors:

- Bremer County. Thanks to Patricia Fox, Deanna Walvatne and their Geometry and General Science classes at Waverly-Shell Rock High School.
- Dallas County. Thanks to Dave Bolluyt of Adel-DeSoto-Minburn High School and his Environmental Science classes for their water-quality monitoring and other active natural resources projects.
- Montgomery County. Thanks to Montgomery County Conservation Board Naturalist Deb Karwal and Mrs.
 Blomstedt's Environmental Studies class

1st Annual Volunteers in Natural Resources Conference: Success!

Stefanie Forret – Information Specialist

Many of you had a chance to attend the 1st Annual Volunteers in Natural Resources Conference in November. For those of you who didn't, you missed a great couple of days! The Hotel Fort Des Moines in Des Moines played host to more than 220 volunteers from across lowa. The food was spectacular (especially those meatballs on Friday night, right Rich?), the location historic, and the speakers sure could pack a room. Both attendees and conference planners alike had a great time. What struck me the most is the level of enthusiasm that was sustained throughout the event. The date and location of next year's conference are not yet known, but we'll keep you posted. If you have any thoughts or feelings about what you'd like included, please feel free to let us know. And, congratulations to the 2001 IOWATER

Volunteer of the Year: Curtis Lundy.

volunteer award recipients! They

Curtis began monitoring Duck Creek in Davenport in 1998 with the Izaak Walton League's Save Our Stream program and has been with IOWATER since near its inception. Curtis's enthusiasm and coalition-building skills helped form the Iowa Riverbend Streamkeepers, uniting teachers, state and federal government agencies, conservation groups, and the Riverboat Development Authority in a five-county area monitoring strategy.

Professional of the Year: Lora Friest. Lora is the project coordinator for the Upper Iowa River Watershed Project (RC&D for NE IA Inc.) in northeast Iowa. Through her efforts, over 80 IOWATER sites and dozens of volunteers and professionals have been coordinated and focused on the 640-thousand acre watershed. Lora has repeatedly helped IOWATER "push the limits" on procedures through advising and participation.

Volunteer Organization of the Year:
Hawkeye Fly Fishing Association. The
Hawkeye Fly Fishing Association was
founded in 1975 by a small group of lowa
anglers and conservationists dedicated to the
promotion of fly fishing and conservation work
to preserve lowa's fly-fishing waters. The
association is an active advocate for environmental policy, participating directly in the
saving of French Creek and expressing

support for strong waterquality standards through the Iowa Department of Natural Resources.



Dr. Mary Skopec of the Ambient Water Monitoring Program presents IOWATER's first volunteer awards at the 1st Annual Volunteers in Natural

Resources Conference in Nov. 2001. Recipients pictured are (clockwise, from upper left) Curtis Lundy, Lora Friest, and Steve Veysey for the Hawkeye Fly Fishing Association.

were:

Clipboard Award (Most Data Submitted):

Don Lund. Donald has proven a tireless volunteer for many years within the Hawkeye Fly Fishing Association. His active pursuits of fly-fishing and dog tracking in addition to his love of the outdoors enhance his contributions to the IOWATER database. Don spreads his volunteer work over eastern lowa, including areas in Fayette, Howard, Johnson, and Winneshiek County.

Clipboard Award (Most Data Submitted):
James Martin. When it comes to energy,
James is definitely a leader. He and cohort
Brian Emerson have established a comprehensive Web organization, "Watersheds
Unite." In addition to his prolific volunteer
water quality monitoring on Snyder Creek,
James also is a valuable volunteer for the
Johnson County Soil and Water Conservation
District with his extensive Geographical
Information System (GIS) expertise.

Farewell to IOWATER Staff Members

Jacklyn Gautsch - IOWATER Field Coordinator

Throughout the 2001 Watershed Tour, Erika McCroskey and Kathy Maline proved valuable members of the IOWATER team. They will be greatly missed as their year-long term with the AmeriCorps program comes to an end. Without their support at IOWATER Level One trainings – distributing materials, setting up and tearing down, working with caterers, answering questions, and pumping me full of caffeine – the season would have been completely unorganized. I'd like to thank them for all their hard work and wish them luck in the future. Thanks, guys!



"The citizen-conservationist needs an understanding of wildlife ecology not only to enable him (her) to function as a critic of sound policy, but to enable him (her) to derive maximum enjoyment from his (her) contacts with the land. The jig-saw puzzle of competitions and cooperations which constitute the wildlife community are inherently more interesting than mere acquaintance with its constitute species, for the same reason that a newspaper is inherently more interesting than a telephone directory."

-Aldo Leopold

IOWATER
lowa Dept. of Natural Resources
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319-0034
www.iowater.net

PRSRT STANDARD
U.S. POSTAGE
PAID
Des Moines, IA
Permit No. 1195

Check out new IOWATER gear windshirts, polos, fleece and hats - NEW colors! www.iowater.net.