

## A Man and His Best Friend Conquer the Mississippi

By Eva M. Johnson, Water Recreation Specialist (Conservation Corps Minnesota)

Cody Weise of Inver Grove Heights has been using his fishing boat to cleanup the backwaters of the Mississippi River. Coming along on the adventure over the last two years has been his yellow lab, Parker.

Cody says, "Throughout my life I have spent countless hours in the outdoors; right here, in the metro area. I enjoy spending time with friends, hunting, fishing and camping on pool 2, 3 and on the St. Croix River. As time passed I began to observe endless amounts of garbage and debris [along] the river and its banks. Knowing about Adopt-a-River and the impact it has on Minnesota watersheds, I was excited to put forth an effort.

"My dog Parker and I [have] spent much quality time this spring and summer by boat, picking up trash along the shorelines of the Mississippi River. Over the last 3 cleanups, we have successfully removed over 780 pounds of garbage and debris from the river. Parker has even found numerous tennis balls, which are truly his favorite toys."



Volunteers along with the National Park Service removed 25 bags of trash dumped near the river.





#### Oil spill in the Gulf of Mexico inspires local cleanup

It is difficult to talk about cleanups today without mentioning the oil spill in the Gulf of Mexico. As of the printing of this newsletter, the oil has stopped flowing into the Gulf but there is still a need to cleanup the oil now in the water. Underwater Adventures Aquarium was collecting toothbrushes, scrub brushes and towels in efforts to help with the oil spill cleanup in the Gulf. They had an overwhelming response by people all over Minnesota and were able to donate over 3,000 pounds of cleanup items.

Each year, Underwater Adventures Aquarium and their annual members celebrate World Ocean's Day by cleaning up the river here in our own backyard. This year's cleanup took place on the Minnesota River on June 12. The group collected 25 bags of trash, most of it household items intentionally dumped near the bridge.

Another river cleanup is scheduled for September 25 for the International Coastal Cleanup with Minnesota's version - Minnesota Beach Sweep. Volunteers are encouraged to join the effort.

## **Pine Point Regional Park Cleanup**

*By Alyssa Whiting and Curtis Griffy longtime Adopt-a-River volunteers* 

Boston Scientific's Green Team, which has for many years worked with the Adopt-a-River program, is at it again. This time, they are conquering an old dump site at Pine Point Regional Park near Stillwater.

The cleanup, which took place on Saturday, June 19, included 27 individuals from Boston Scientific and Smiths Medical. Seven of these individuals were participating in their first environmental cleanup!

Pine Point Regional Park has a very interesting history. In 1858, it was Minnesota's second "poor farm"-a home for the chronically indigent or people just temporarily down on their luck. Stillwater once was the territorial capital of the Upper Midwest and its citizens had a desire to help the less fortunate. This concern culminated in the construction of the poor farm in 1858. It became both a prize-winning dairy farm and a workplace for thousands throughout its 100 years of operation. When the farm was decommissioned in 1957, pine trees were planted, and now, it is Pine Point Regional Park (PPRP).

The PPRP cleanup started when Joe Gentry (an avid outdoorsman) was exploring the park and found a massive pile of trash dating back at least half a century (primarily rusted metal and broken glass). It was cascading down the side of a ravine. The most obvious remnant of the poor farm days was this old dump, featuring institutional trash such as rusty #10 cans and related materials.

The cleanup collected 49 lbs of plastic, 1,146 lbs of metals and 276 lbs of porcelain. During the cleanup, separate



Volunteers busy working in the ravine, once used as an institutional dump for a county poor farm, closed in 1957.

bins for materials were located where volunteers could easily sort the material.

As the photos show, the successful efforts of everyone who participated in the Pine Point Clean Up reveal the power of collective action! Pine Point is an even sweeter place to visit now with its natural beauty uncovered. But the work is not finished.

Another smaller clean-up effort at the same site will be held to harvest the thousands of shards of glass that remain embedded in the surface, now that the rains have washed away the layer of topsoil

Source: Washington County Historical Society website, http://projects.wchsmn.org/reference/sites/pine-point (accessed June 2010).



**BEFORE:** An old dumpsite in a ravine located in Pine Point Regional Park. Numerous tin cans and appliances.



AFTER: On the surface everything was removed or dug out of the ground.

# **Best Catch of the Day**

While removing tons of trash from our public waters, volunteers cannot help but notice that virtually every aspect of our culture finds its way into the river. Some rather strange things have been found during cleanups all across Minnesota. To note this fact, a trash contest, known as "Best Catch of the Day: the Captain's 'Awards of Excellence' Ceremony" became a way to acknowledge the hard work of volunteers.

If you currently organize a cleanup, this contest is another way to engage your volunteers and promote friendly competition. Interest is intensified if you offer prizes. The riverboat captain's version of the contest includes four categories (feel free to create your own!):

**1. Troubled Waters Award:** This award is given to the person who finds the object most troublesome to people and/or wildlife. The winners in this category tend to find materials that could cause wildlife injury through strangulation, suffocation, entrapment or ingestion. Past winners have found balloons, six-pack rings or fishing line, lures or discarded oil containers.

2. Ancient

piece

Because h communities

Award for an intriguing

trash in the floodplain, the riverbank has been a treasure trove of old things. For example, a pre-Civil War black glass bottle was found

in an area, known to be

the home of Pig's Eye

Parrant. the French-

of

Artifact

history.

dumped



1949 Minnesota Centennial License Plate found at an old dump site.

Canadian trader, who, in the 1840's lived where Saint Paul is now located.

**3. Unique Trash Award:** River cleanups tend to produce artifacts from virtually every aspect of the human endeavor. This can be exciting, alarming, disturbing or just plain unique, and therefore interesting.

**4. Captain's Distinction Award:** These awards generally go to those who have demonstrated, from the captain's point of view, the most energy and enthusiasm for cleaning the river. One year this award went to the volunteer who got the dirtiest.

These "trophies" capture a small portion of the mystery and adventure of river cleanups. They are the things that produce fond memories while offering a significant service to the community.

You ask what is the strangest thing that Paul Nordell (Program Coordinator) has found during a cleanup? It was an old pop can that made noise when he gently picked it up. When he cracked open the can, it turned out that a crayfish had become trapped in it and had grown too big to crawl out. It had been living in a can, surviving on whatever washed in as food!



Sisters Jodi and Julie found an old stuffed toy in the Belle Plaine State Wayside cleanup last October 3rd.



Message in a film canister found at a Mississippi riverboat cleanup, it states "Placed in water at Minnehaha Falls - July 17, to the person who finds this tube...I'm a wood carver - I will mail you a carved wood spoon" then the person's name and address. It has a No.21 on it so we're assuming there are others out there.

## What will you find? Something old, valuable, unusual?

## Unique finds reported by Adopt-a-River volunteers:

ATM Machine	Cow
Kids Swimming Pool	Deep
Bikes	Duck
Microwave	Ice S
Exercise Machines	Love
Artificial Christmas Tree	e panc
Carnival Ducks	Two
The book, Iliad	Jar o
,	

Cowboy Boot Deep fat fryer Duck Decoy Ice Skate Love letters and a pancake griddle Two Bowling Balls Jar of Pickles

## Celebrating the Significance of Water

## HISTORICAL MOMENT: Linking St. Paul to Taylors Falls by Rail, August 1, 1870

Paul E. Nordell, Coordinator, DNR Adopt-a-River Program

On August 1, 1870, the Lake Superior and Mississippi Railroad completed its first train trip between Saint Paul and Duluth. This first rail route between these points significantly impacted developments in the deep basalt gorge of the Saint Croix River at Taylors Falls. Mining, logging and tourism pressed in upon the valley as never before. Just two years earlier, in 1868, this line had been completed as far north as Wyoming, Minnesota, just 30 miles from Saint Paul. That was the same year the Taylor's Falls and Lake Superior Railroad had been organized, with a goal of linking Taylors Falls with Wyoming, a distance of 19 miles. By 1880, Taylors Falls and Wyoming had been linked by rail.

In an era before steel and concrete was used in construction, the sandstone available at the quarries of Taylors Falls was an essential building material. In addition, the Taylors Falls Mining Company, as late as 1875, was doing exploratory drilling for copper and silver in Taylors Falls. A 70-pound copper nugget had been found in the area, and the geology was similar to the rich copper district of the Upper Peninsula of Michigan. In the late 1860's, experiments were also being conducted to pulverize the rock of Taylors Falls for a macadamized road surface for West Seventh Street in Saint Paul.

It was the pulverizing project that fixed in the mind of George Hazzard that something had to be done to preserve the natural wonder of the gorge of the Saint Croix River. In Hazzard's own words he said, "This crushed the Park idea into my soul." Eventually he became the first commissioner of "Inter State Park, Dalles of the Saint Croix".

As a child in 1857, Hazzard had first seen Taylors Falls by steamboat. After years of directing tourists to the spectacular river gorge as a railroad travel agent, on February 5, 1895, he wrote a short 12-line notice in the *Saint Paul Dispatch* concerning his desire for a state park at Taylors Falls. The park would halt the rapidly deteriorating condition of the basalt gorge in Taylors Falls. Hazzard's public appeal received strong backing all the way to the national level, and soon Minnesota's second state park had been organized. It required cooperation between two states to get the job done. The Wisconsin bill was signed April 19, 1895



From the Wisconsin side of Interstate State Park, looking south, viewing Angle Rock on the Minnesota side (Courtesy of DNR).

and a more comprehensive Minnesota bill was signed April 25, 1895. The Minnesota bill called for protection from what Hazzard called "the vandal man [who had] marred or emblazon[ed] the rocks with advertisements of patent medicines or pink pills for pale people, by writing his own name on every smooth surface of rock". Besides the graffiti removal, an old mill town of 30 to 40 buildings was removed, trash was removed from the potholes, and an extensive restoration was begun.

Today this park, known as "Interstate State Park" (also the first Wisconsin state park), consists of 1,330 acres in Wisconsin and 298 acres in Minnesota. It preserves and protects spectacular views of the basalt gorge. On the Minnesota side, the world's deepest potholes were carved thousands of years ago. They were ground through solid basalt by stones spinning in the swirling waters of the powerful glacial Saint Croix River.

One of the biggest changes in the area since the park was established came in 1931, when U.S. Highway 8 was blasted through the rock on the Minnesota side of the park. Finally, in 1948, the very railroad that ushered in the early economic development of Taylors Falls was abandoned.

Sources: Hazzard, George H. (1896) Interstate Park: Lectures, Laws, Papers, Pictures and Pointers, Pioneer Press Company, Saint Paul; Prosser, Richard S. (2007), Rails to the North Star, U of MN Press, Minneapolis; Wikipedia, en.wikipedia.org, (6-28-2010); Winchell, N.H. (1888) Volume II, The Geology of Minnesota, the Final Report, Pioneer Press Company, Saint Paul.



## Plain Pocketbook mussel: Lampsilis cardium

Eva M. Johnson, Water Recreation Specialist (Conservation Corps Minnesota) & Bernard E. Sietman, DNR Malacologist

#### Nicknames

Grandmaw, Plain Pocketbook, Pocketbook

#### Classification

Phylum Molusca, Class Bivalvia, Family Unionidae (49 native species in Minnesota)

#### Habitat, Water Quality and Life Cycle

Freshwater mussels, such as the Plain Pocketbook, are found in many streams throughout Minnesota. Mussels can live up to 100 years. The mussel exists at the bottom of the food chain. Muskrats, raccoons and some species of fish rely on mussels for nourishment.

Mussels are a sedentary species, but move slightly using their "foot" to push through the sand. This also helps the mussel to burrow into the sediment and anchor itself in place. They actually stabilize the stream bottom, thus minimizing the scouring effects of floods and wave action.

Mussels play a key role in aquatic environments and are considered to be "ecosystem engineers" because they modify aquatic habitat, making it more suitable for themselves and other organisms. One of the valuable functions performed by mussels is capturing organic matter from the water column which they siphon. They then deposit this material back to the sediment, making it available for other invertebrates and fish to consume. During the feeding process, mussels "clean" the water they live in by removing phytoplankton and undesirable particles and chemicals. The mussel's shell provides an important substrate for algae and insect larvae to attach, and when present in large numbers, mussels may become the basis for underwater gardens that in turn attract fish to feed, including their host fish. The first stage of the mussel's life cycle is spent as parasites on a host fish.





A female plain pocket book displaying a lure to attract a host fish such as a smallmouth bass or walleye.

View a video of this display (U.S. Fish and Wildlife Service) www.fws.gov/Midwest/mussel/multimedia/video/ displays/plain\_pocketbook/plainpocketbook/plainpocketbook.html

#### Identification

This native mussel can be identified by its inflated circular shape and the exterior color of its shell (yellow to light brown usually with green rays). Shells of the young mussels are thin but grow thicker with age. Males have an oval shape and average 4 inches in length. Females have a more rounded shape and average 3.5 inches in length. Though both have been documented up to 6 inches in length.

#### **Mussel Collecting and the Law**

No live mussels may be collected in Minnesota. If you pick up a live mussel, return it to the water immediately, being careful to place its foot end in the stream bottom so about two-thirds of the shell is buried. If you see a lot of mussels in a stream, chances are the stream has clean water, good fishing, and plentiful wildlife.

Sources: Minnesota Department of Natural Resources - Mussels http://www.dnr.state.mn.us/mussels/index.html, accessed July 12, 2010 and Sietman, Bernard E. (2003) Field Guide to the Freshwater Mussels of Minnesota, Minnesota Dept. of Natural Resources.



### DNR riverboat cleanup volunteers tackle Mississippi River on June 16th

The Minnesota Department of Natural Resources' (DNR) Adopt-a-River Program sponsored the Mississippi River cleanup in partnership with Padelford Packet Boat Company and Conservation Corps Minnesota. The event, in its 19th year, was open to volunteers and is supported by many area businesses, agencies and other organizations.

This year's cleanup took place near South St. Paul and the Wakota Bridge. Volunteers removed a 30yard dumpster full of tires, barrels, bottles, cans, foam, plastic and occasionally furniture. The haul-away was combined with two other cleanup projects. The result was a whopping 4 tons of trash!

The river cleanups were part of a continuing effort to remove the garbage deposited by spring flooding and past flood-plain dumping. The source of the trash is storm sewers and washed-in debris along the riverbank. Removing this debris improves living conditions for all who depend upon the river, whether they are humans, fish or other aquatic life.

## **Creating Sculpture**

Each year, an artist is chosen to create a sculpture made entirely of river trash (or lake, ditch, wetland, etc). The artist usually attends the riverboat cleanup and participates while scavenging for items suitable for the sculpture. In years past, many unusual creations have appeared including a Styrofoam swan, a dragonfly, a turtle and last year's giant sturgeon. To see information about previous sculptures, visit: http://www.mndnr.gov/adoptriver/sculptures.

#### **About the Artists**

Chip Addington and Caylon Hackwith are the artists chosen to create this year's river trash sculpture for display at the Minnesota State Fair. These recentlygraduated sculptors have been inspired by life in the mountain states, by guiding Boundary Waters canoe trips and by visiting various river cleanup sites in the Twin Cities.



Volunteers disembarked from the Jonathan Padelford at cleanup sites along the Mississippi River.



Cleanup crews filled boats which then brought the trash to the dumpster on shore. National Park Service boat pictured.



The Stone Arch Bridge spans the hard-working Mississippi River. By 2009 National Park Service Big River Journey Art Contest Winner Aminata Kromah.

Big River Journey is an integration of river and classroom experiences that connect 4th-6th grade students with the science and heritage of the Mississippi River, and promote stewardship.

On board a Mississippi Riverboat, the Adopt-a-River learning station is called "Mississippi Crime Scene Investigation". Students investigate authentic river trash and use analytical techniques to determine how the trash entered the waterway.

For more information on sending your students to Big River Journey: http://www.nps.gov/miss/forteachers/brjindex.htm

## Welcome New 2010 Adopt Groups!

Boy Scout Troop 73 - Pine River/Backus Brokerbin.com Centennial High School - First Robotics Team Chelsey Knaack City of Marshall City of South St. Paul Coon Creek Watershed District Cub Scout Pack 413 **Cummins Power Generation** David Hetrick and Family **Duluth-Superior Eco Rotary** Flyway Customs Greg Seppelt and the St. Paul Fishing Club Hansen and Dornfield Families Hibbing Taconite Company James Myers Lac qui Parle Clean Water Partnership Medtronic Shoreview Mesabi Range Community & Technical College Metro Mosquito Control District Minneota FFA Multicultural Communities in Action -Americorps Pesik's Boys **RCTC Ecology Club** Santa Fe Natural Tobacco Company St. Cloud State University - Environmental Sociology Class Southwest Minnesota Christian High School St. John the Baptist - J. Care

## Purple Reporting Card Now Online!

Instead of mailing your purple reporting card, you can fill out the online form by visiting <u>www.mndnr.gov/adoptriver</u> and clicking on "Report Your Cleanup Results Online".



Don't forget to send in your purple reporting cards for the 2010 cleanup season.

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Layout, graphics, and backgrounds by Eva Johnson, 2010 Water Recreation Specialist.

Please direct your comments, questions, and suggestions to the editor of Cleanup Review at 651-259-5620 or to the Adopt-a-River Coordinator, Paul Nordell at 651-259-5630; FAX 651-297-5475; MN Toll Free: 1-888-646-6367; adoptariver.dnr@ state.mn.us; or write to: MN DNR, Parks and Trails Division, 500 Lafayette Road, St. Paul MN 55155-4052.

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# **Adopt-a-River**

## **Cleanup Review Newsletter**

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#### **Cover Story:** A Man and His Best Friend Oil Spill inspires local cleanup

Pine Point Regional Park Cleanup (Page 2) Best Catch of the Day (Page 3) Historical Moment, Interstate State Park (Page 4) Creature Feature, Plain Pocketbook Mussel (Page 5) Organize your own cleanup or, to find a scheduled cleanup near you, check our calendar of events online at: WWW.Mndnr.gov/adoptriver/events.html Events are posted as we receive notice, so be sure to check the list frequently!

CLEANUP STATISTICS: AUGUST 2010 2,960 cleanups - 81,281 volunteers - 5,862,464 lbs collected - 9,733 miles cleaned (since program began in 1989)