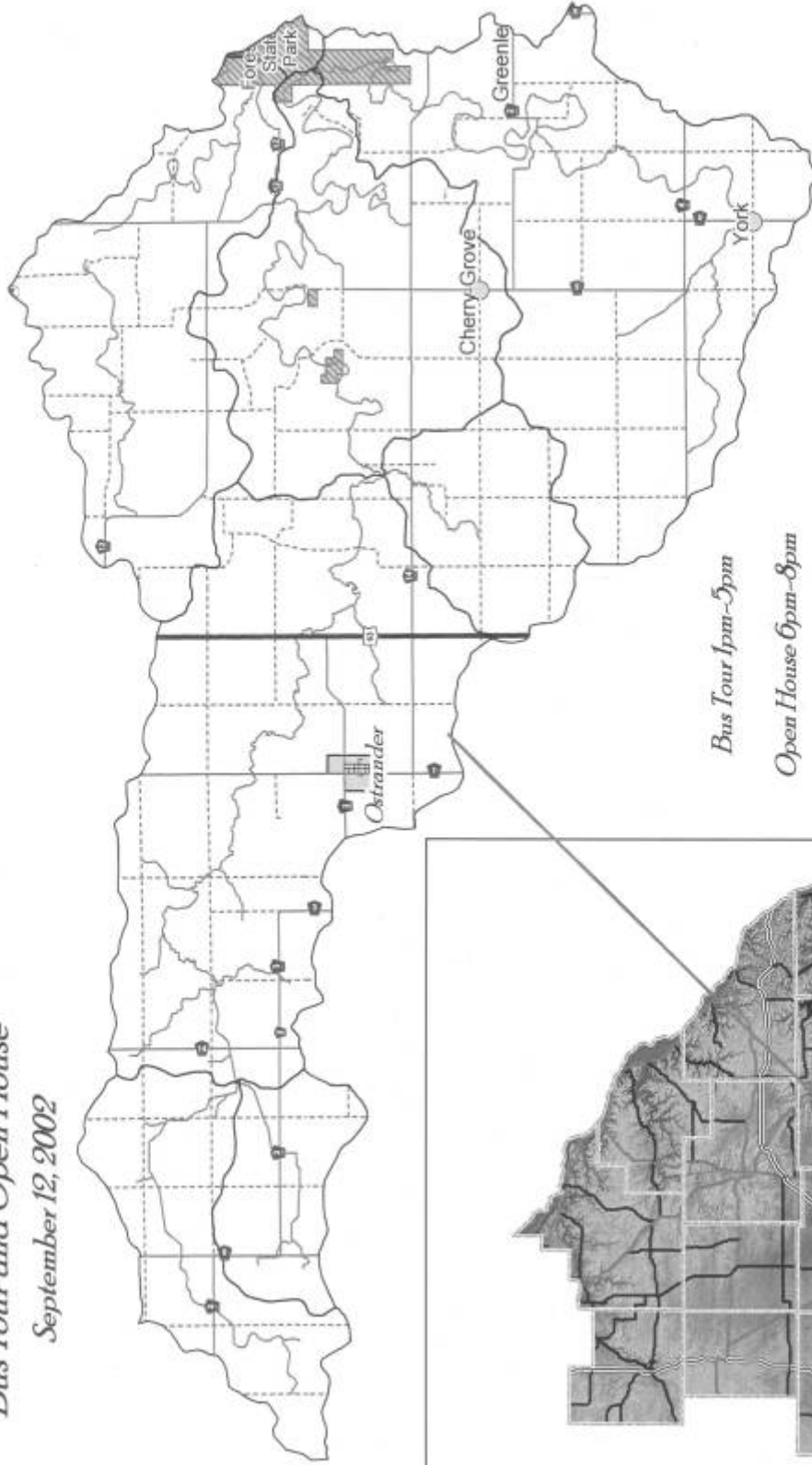


*Root River Recovery
Bus Tour and Open House
September 12, 2002*



*Bus Tour 1pm-5pm
Open House 6pm-8pm*

**Sponsored by: The South Branch Root River
Watershed Committee and the Fillmore Soil and Water
Conservation District.**



SOUTH BRANCH ROOT RIVER WATERSHED PROJECT

Root River Recovery Bus Tour

Thursday, September 12, 2002

1:00 – 5:00 p.m.

Site #	Time	Site Name	Description
1	1:00	Forestville State Park	Leave picnic shelter parking lot
2	1:10	Co. Rd. 5 Streambank Project	This stabilization project to stop erosion encroaching into road right-of-way included the installation of trout habitat lunger structures under riprap. This was a cooperative project between DNR Fisheries and the Fillmore County Highway Dept. (Jeff Weiss-DNR Fisheries)
3	1:15 to 2:00	Mystery Cave	30-minute tour of cave (Warren Netherton - DNR - Cave Manager) 10-minutes to view watershed kiosks and site for new interpretive center.
4	2:15 to 2:35	Fairview Blind Valley	Jeff Green will talk about the dye traces done from the blind valley and the geology that causes blind valleys to form. Water entering the sinkholes travels to Moth and Grabau Springs, which form the headwaters of Forestville Creek. (See Fairview Blind Valley map.) Upstream of the blind valley is a well-developed wetland area that provides water storage and water purification benefits. (See National Wetlands Inventory (NWI) map.)
5	2:45	Goethite Wildlife Mgmt Area	Drive by WMA which was formerly an iron ore mining area. Old iron tailing pits have filled with water. Deer, waterfowl, pheasants, grouse and squirrels are found here. The area is managed for hunting and trapping. (See background information on iron mining in Fillmore County.)
6	2:50	Ironwood Landfill	The landfill was closed in 1980 after barrels containing toxic materials were found to be leaking. About 1300 barrels were removed. The site has been undergoing cleanup and monitoring ever since, which is expected to continue another 25 years. (See background info and map)
7	2:55	Ostrander Wastewater Plant	The city is in the process of getting funding to upgrade the facility and install a recirculating sand filter and drainfield to replace the existing outlet pipe, which discharges to the South Branch about 1 mile NE of the plant. (MPCA staff)
8	3:00	Continuous CRP Buffer	Cropland is enrolled in the program and planted to trees to form a buffer that filters nutrients and reduces runoff from adjacent fields into the river. (See Continuous CRP information)
9	3:10	Former Lake Bennington	Lake Bennington was representative of what this area formerly looked like. Agricultural drainage has allowed this land to be farmed. Judicial Ditch #1 outlets at this point. Areas upstream were channelized to promote drainage of the area producing prime farmland. (See hydric soils map.)
10	3:25	Judicial Ditch #1 (north)	High spoil banks were not removed when the ditch was constructed in 1920. Tall cottonwoods and the meandering nature of the stream testify to the lack of continuous maintenance. Fish surveys rate this area as good to excellent warmwater fish habitat. (Mower SWCD staff) (See JD #1 land use map.)
11	3:45	Judicial Ditch #1 (south)	Tile inlets and little riparian vegetation along stream, although banks appear to be stable. Intensive row crop production; some conservation tillage being used; little water storage on the landscape.

12	3:50	Mound Septic System	A mound septic system can be seen on the west side of the road south of town. Where the water table is close to the surface, mounds are required in order to meet the 3' separation distance between the drainfield lines and the water table.
13	3:55	Ostrander Sinkhole	A large sinkhole in NE corner of the intersection of County Roads 1 and 14 has had a dye trace done. The water flows to springs on Etna Creek. A Continuous CRP buffer is being installed by the owners around this sinkhole. (See Ostrander sinkhole map.)
14	4:00 to 4:30	Steve and Diane Hafner	Hafners decided to enroll land around a sinkhole east of Hwy 63 and along the river (home place) into Continuous CRP. Two years of flooding had taken out crops adjacent to the river. They have planted the area to grasses to form a buffer and receive an annual rental payment for the practice. (Hafners) This is a good site to look at the physical characteristics of a stream and explain how these characteristics reflect conditions in the watershed draining to this point. (MPCA staff)
15	4:35	Cherry Grove "Junkhole Sink"	A sinkhole north of Cherry Grove was used commonly as a dumpsite. Some of the junk was buried when the new road was constructed. Dye traces indicate that water from here flows to Canfield Big Springs in the park. (Jeff Green- DNR Waters) (See Cherry Grove map for this site and next two sites.)
16	4:38	Fillmore County Highway Shop	Leaking underground storage tanks had to be removed by the county, and a monitoring program was begun. Private wells have shown some contaminants from the leak. (Jeff Green)
17	4:40	Cherry Grove Blind Valley Scientific and Natural Area	The area was acquired in 2000 by the DNR after the owners considered, then rejected, the idea of opening a quarry on the site. The water from here flows to Canfield Big Springs. (Warren Netherton and Jeff Green)
18	4:50	Rifle Hill Quarry	A water detention pond was constructed in the quarry to allow sediments to settle out before the water enters the stream channel of Canfield Creek. Prior to the pond's existence, the water in the creek turned white from the lime sediments. (Lee Ganske) The quarry cuts through the Maquoketa and Dubuque formations into the Prosser limestone, which is now being quarried. (See geologic stratigraphic column.)
19	4:55	Bluffland development/ Riparian buffer/ Meyer's springshed basin	On the cliff top above the South Branch, several homes are built in a wooded area with many sinkholes and shallow soils. A CRP contract is being developed for a riparian buffer in the pasture south of the bridge. The buffer will be fenced and planted to trees and grasses. See Continuous CRP information. Jeff Green will speak about dye tracing done that has delineated a small springshed basin called Meyer's basin (see Map #4). The basin is almost entirely in permanent vegetation and could be used to compare how land use affects spring water quality, e.g. comparing it to a similarly sized basin which is mostly in row crop production.
1	5:00	Forestville State Park	Return to picnic shelter parking lot.