

Island Pit
Rainbow Trout Harvest Assessment
Sullivan County

Date of Survey: April 1 to 5, 2009

Biologist: David Kittaka

Survey Objectives: Evaluate the spring rainbow trout stocking at Island Pit, Minnehaha Fish and Wildlife Area and evaluate the limited season closure for trout at the property.

Methods: An assessment of the trout stocking program was conducted with an “Opening day” through the first weekend angler creel survey. A roving creel design was used (Pollack 1994). A half day creel survey was conducted April 1 (opening day) and a full day of creel was conducted Sunday April 4, 2009.

Daily effort was calculated separately for the two samples and averaged. This was multiplied by number of days evaluated (n5). Average daily effort was used to calculate an estimated harvest.

Results and Summary: Island Pit is a 48-acre strip pit located on the Minnehaha Fish and Wildlife Area near Sullivan, Indiana. A put-and-take rainbow trout stocking program was initiated in 1988 (Schoenung 1999). Currently, Island Pit is stocked annually in the spring with approximately 3000, 8 to 12 in rainbow trout. In 1998, it was recommended that Island Pit be closed to fishing beginning March 15 and opened April 1, allowing the stocked fish to disperse prior to being subjected to fishing pressure. On March 16 and 17, 2009, 2,662 rainbow trout, with an average length of 10.9 in, were stocked.

April 1 through 5, 2009, there were an estimated 243 anglers that fished 946 h (Table 1). The total harvest for the first five days of the season was an estimated 491 trout (Table 2). Approximately 18% of the stocked trout were harvested during this time.

Sixty-five percent of the anglers fished from boats and had a trout per angler catch rate of 1.6. Shore anglers were slightly more successful at 2.1 trout per angler.

Twenty-one years after the trout stocking program was initiated, the public remains supportive of this stocking. Many comments from anglers were positive. The closed season after stocking has allowed the trout to disperse throughout the lake. Sixteen days after the trout were stocked anglers were observed catching trout all around the lake.

Recommendations:

- Continue the rainbow trout stocking program at Island Pit, Minnehaha Fish and Wildlife Area.
- Maintain the March 15 to April 1 closed fishing period.

Literature cited:

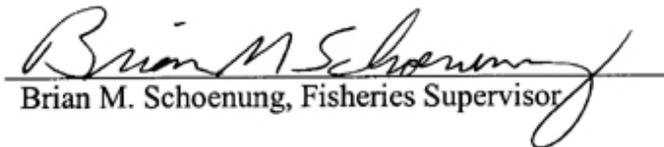
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Approved by:


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Table 1. Estimated fishing pressure, hours per angler, and estimated number of anglers at Island Pit, April 1 to 5, 2009.

Estimated fishing pressure (h)	Hours/angler	Estimated anglers
946	3.9	242.6

Table 2. Daily effort, observed catch rate, daily catch, and estimated harvest of rainbow trout at Island Pit, April 1 to 5, 2009.

Average daily effort (h)	Observed daily catch rate	Daily catch	Estimated harvest
189.2	0.52	98.14	490.7