Talking points- Sunfish Management Fact Sheet



For the MN DNR Grand Rapids Fisheries Area. Winter 2011/2012

Need for Management

- Sunfish are the most harvested fish in MN about 16 million are harvested per year.
- Documented declines in quality have led to increased interest from anglers in maintaining or improving quality populations.



Bluegill importance and biology

- Bluegills are the largest and most widespread Minnesota sunfish.
- Bluegills may live 10 years or more.
- Their schooling nature makes them susceptible to overfishing.
- They don't all spawn at once but spawn in colonies from May through July.
- Some males (parental males) build and guard nests. These males have the potential to grow large and are easily harvested because they stay at the nest until the fry hatch.
- Other males mature at a much younger age and size. These males, called "sneakers" move among nests attempting to steal fertilizations. These males grow slow and have high mortality, thus never reaching desirable sizes.
- Factors that determine which spawning strategy a male chooses are not fully understood, but are believed to be strongly influenced by environmental conditions and somewhat by genetic characteristics.

Population dynamics

- Most lakes produce "stunted" bluegills that rarely, if ever, exceed 8 inches. These
 populations have high numbers of bluegill and competition results in slow growth. Fish
 from these populations often don't reach 6 inches until they are 7 years old or more.
 These populations may be found in lakes with abundant spawning habitat, limited lake
 fertility, heavy harvest of older fish and few natural predators of small bluegill.
- A few lakes produce "quality" bluegills that may exceed 8 or even 10 inches. These populations have low to moderate abundance and the fish grow fast, often reaching 6 inches in as little as 4 years. These populations are often associated with lakes with limited spawning habitat, high lake fertility, low to moderate harvest and a balanced predator to prey ratio.

Harvest effects

• Large fish are often targeted by anglers and removing the large fish can result in decreased size quality in the population as large fish are removed faster than they can be replaced.



Quality Populations at risk of Decline

- Several area lakes have quality populations, but fishing pressure may be impacting the quality of their fisheries. These lakes include: Sand (near Bowstring), Split Hand, Lt. Split Hand, Cut Foot Sioux, Lt. Cut Foot Sioux, Dixon, Blackwater, Jay Gould, and Lt. Jay Gould.
- Reports from local residents and Conservation Officers suggest that high harvest occurs and fishing pressure has increased in recent years.

DNR Fisheries Management Actions

- *Monitoring* Spring special assessments focusing on sunfish are planned for many lakes. DNR will collect information on abundance, size, growth, and age distribution.
- *Regulations* Reduced bag limits are the best management tool for maintaining quality sunfish populations but depend on public support.
- A five fish reduced bag limit has been on Bass Lake near Cohasset and Grave Lake near Marcell since 2001. Assessments since that time indicate that quality sunfish populations are being maintained in these lakes and public feedback has been favorable.
- A ten sunfish reduced bag limit has been on Deer, Battle, and Pickerel lakes near Effie since 2005. The DNR will continue to evaluating the effectiveness of these regulations until 2015, when they will be reviewed. Public input will be requested at that time.
- Public input in 2011 indicated interest and support for five sunfish bag limits on Split Hand, Little Split Hand, and Dixon lakes. These regulations will go in effect in March of 2012 and are expected to maintain quality sunfish in these lakes and populations will be evaluated on a regular basis.
- **Outreach-** Anglers are encouraged to voluntarily limit their harvest on other area lakes with quality sunfish populations. Anglers can help maintain quality populations by reducing harvest, releasing large sunfish, and practicing catch and release.
- For more information about quality panfish management, contact the MN DNR Grand Rapids Area Fisheries at 218-327-4430.