

# Iowa Stream Fish Species of Greatest Conservation Need: Using IAGAP and REMAP Products to Refine Prioritization and Guide Assessment

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## Goals and Objectives:

- Refine Iowa's prioritization of stream fish species of greatest conservation need (SGCN).
  - Better understanding of the occurrence and distribution of high-priority fish SGCN in wadeable Iowa streams.
  - Test the potential of Iowa Gap Analysis Program (IAGAP) and other tools for predicting occurrence of high-priority fish SGCN in Iowa streams.
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## Progress:

In FY2009, objective one was completed by identifying a prioritized list of fish species of greatest conservation need (SGCN) with the aid of project partners and fisheries professionals. Using the prioritized SGCN list and Iowa Aquatic Gap Analysis Project (IAGAP) predictive models, a subset of species that would maximize a gain in information were selected for intensive sampling (black redbreast *Moxostoma duquenoisii*, redbreast shiner *Lythrurus umbratilis*, tadpole darter *Noturus gyrinus*, slenderhead darter *Percina phoxocephala*, blackside darter *Percina maculata*, banded darter *Etheostoma zonale*, southern redbelly dace *Phoxinus erythrogaster*, and Ozark minnow *Notropis nubilus*). A finalized list of 83 potential sampling reaches were also compiled to sample for each of the eight focal species an adequate number of times in stream reaches within three categories (1) stream reaches within the species range, but not predicted by the IAGAP models to contain the species, (2) previously un-sampled stream reaches predicted to contain the species, and (3) previously sampled stream reaches with documented occurrences of the species.

During FY2009 substantial progress was made towards completing objective two by sampling fish and quantifying habitat in 49 stream reaches. During the sampling season, 66 different species and 31,977 individual fish were sampled. Of the 66 different species that were sampled, 17 were SGCN, including seven of the eight focal species.

## Future Plans:

In late FY2009 and early FY2010, preliminary data analysis will begin and preliminary results will be presented at several professional conferences. Due to the high number of stream reaches that were sampled, more potential sampling reaches will be selected for the next sampling season.

In late FY2010, we will complete objective two by sampling all of the selected stream reaches for fish, as well as quantifying habitat.