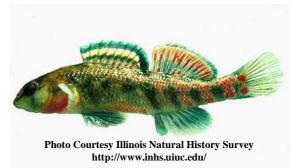
## Orangethroat Darter Etheostoma spectabile

Habitat Preference: Orangethroate darters prefer small to mid-sized well-meandered streams and spring runs. They are usually associated with well-timbered riparian zones. They are more tolerant of low flow and warmer water than most darter species found in lowa.



## Threats:

- Channelization
  - A naturally meandering channel is needed to maintain the variety of substrates and current velocities that lead to high quality habitats (e.g. clean riffles and sandy runs).
  - Streams with a naturally meandering channel form are much better able to accommodate high silt loads than are channelized streams.
- Urban development
- Removal of natural timber riparian zones.

## **Habitat Improvement Guidelines**

- Avoid additional channel modifications for commercial navigation; allow, to the extent possible, natural river processes (e.g., meandering, sandbar formation) to occur.
- Reestablish natural timber riparian vegetation.
- Protect areas with orangethroat darter populations from development.