

## **Round Pond Fish Reclamation Proposal (in brief)**

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**Goal:** To restore a native fish community to Round Pond (Holland).

**Purpose and need:** At one time, very simple fish communities existed in most of Vermont's small ponds. The ponds that had suitable temperature and oxygen conditions supported self-sustaining populations of wild brook trout. The introduction of nonnative fish species has resulted in the elimination of wild brook trout from nearly all of these ponds. Currently, there are only six ponds in Vermont that are known to support self-sustaining populations of brook trout that are robust enough to provide quality fishing opportunities. Pond reclamation is needed in order to increase the number of small ponds with native fish communities.

### **Background:**

- Surface area  $\approx$  17 acres
- Maximum depth  $\approx$  50'
- Fish community
  - 1959: brook trout, brown bullhead, blacknose dace, northern redbelly dace, and lake chub
  - 1984: only chain pickerel and longnose sucker collected
  - 2013: only chain pickerel and golden shiner collected

### **Why Round Pond?**

- Surrounding land owned by VTFW
- Low risk of re-introduction of nonnative fish
  - No camps
  - Hike in only
  - Outlet is intermittent and steep
- There is essentially no outlet during dry periods

### **Proposed methods:**

- Chemical reclamation with rotenone
  - Degrades quickly through abiotic (hydrolytic and photolytic) and biological mechanisms with residues generally persisting from a day to several weeks.
- Rotenone can be deactivated with potassium permanganate.
  - May not be necessary if reclamation is done when there is no outflow from the pond.
- Restock native fish species
  - Brook trout
  - Northern redbelly dace

