

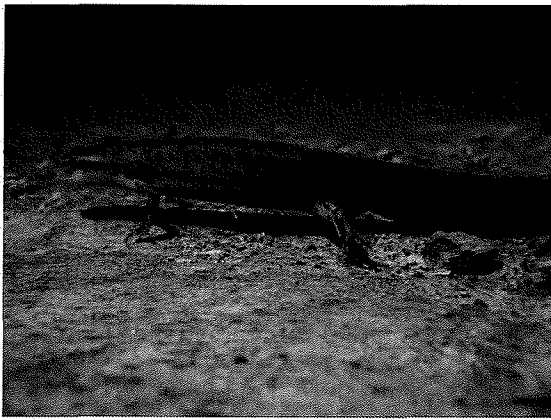
Report on Wildlife Projects in Cromwell Brook to Friends of Acadia

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Minnow Trapping

Four minnow traps were set with bait in Cromwell Brook as part of an ongoing study to monitor the presence of the invasive fathead minnow (*Pimephales promelas*), which was detected in the Cromwell Brook watershed in 2009. Traps were set and



monitored by volunteer Erickson Smith, with the help of volunteers Kristen Dillon and Chris Heilakka (all youth). On August 19, two traps were set just upstream of the entrance road into Sieur de Monts, while the other two were set on the other side of Great Meadow where the brook runs under the Park Loop Road. Traps were then checked on August 20th, rebaited on

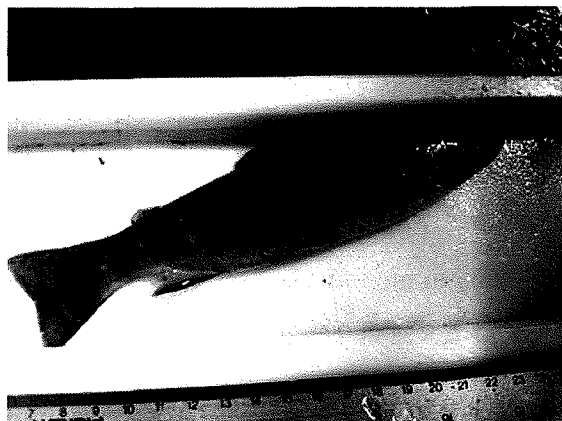
August 21st, and then checked again on August 22nd. 20 individuals were captured, with 6 species represented: emerald shiner (*Notropis atherinoides*), golden shiner (*Notomigonus crysoleucas*), blacknose shiner (*Notropis heterolepis*), brook trout (*Salvelinus fontinalis*), eastern red-spotted newt (*Notophthalmus viridescens*), and tadpole (*Lithobates* sp.).

Last year, one fathead minnow was caught at the Park Loop Road crossing in Cromwell Brook. This year, however, no fathead minnows were trapped during the survey. All species that were found in the survey are native to Cromwell Brook and Mount Desert Island. While it is encouraging that the fathead minnow was not found in the brook this year, the Wildlife division will continue annual surveys to make sure native minnow populations are not being displaced by the fathead minnow.



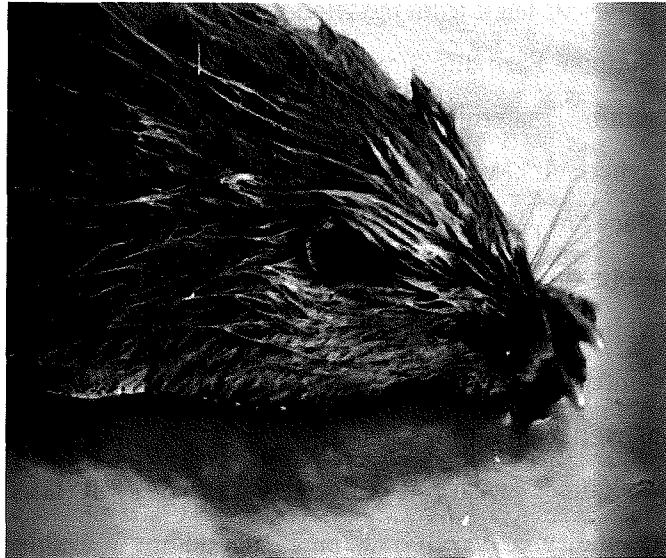
Fisheries Monitoring Pilot Project

This August the Wildlife division chose four random sites at crossings along Cromwell Brook as a pilot study for a potential long-term fisheries monitoring program. These four sites were surveyed by Wildlife employees as well as volunteers Erickson Smith, Kristen Dillon, and Lisa Bjerke (all youth). At each site, a 50-meter stretch of the Brook was electrofished twice, with three individuals netting fish, and the last individual keeping the caught fish comfortable in buckets. 36 individuals of 8-10 species were caught, measured and weighed, and the data recorded to establish a baseline for future replicated studies. The species included brook trout (*Salvelinus fontinalis*), blacknose dace (*Rhinichthys atratulus*), bridle shiner (*Notropis bifrenatus*), and golden shiner (*Notomigonus crysoleucas*). This data will be essential for comparison in future years to monitor the health of Cromwell Brook and its freshwater fish populations.

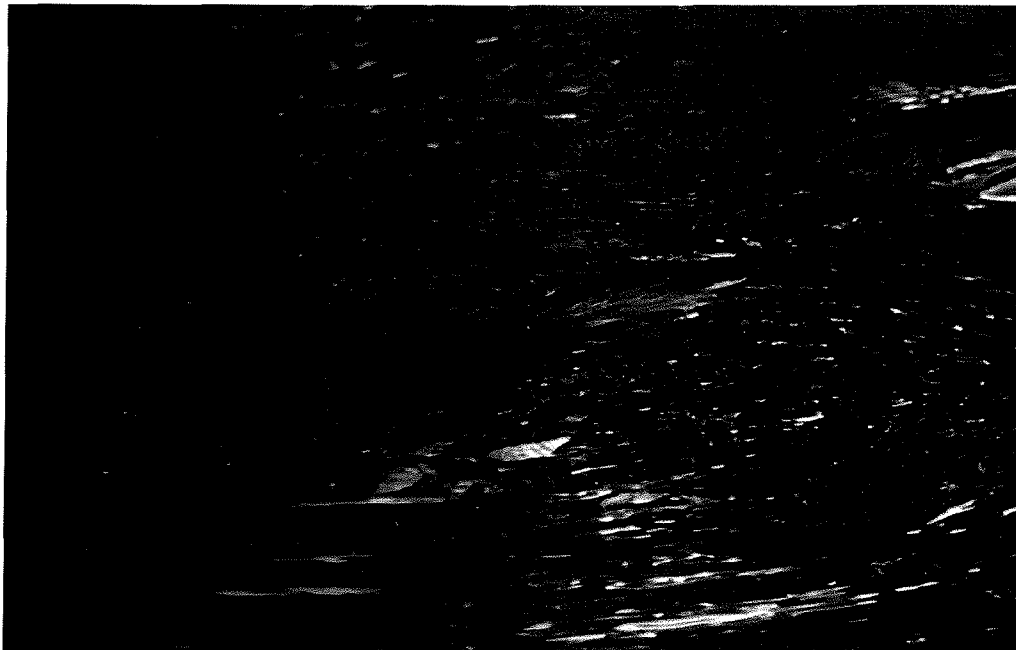


Beaver Survey (Sieur de Monts)

The beaver family that took residence in Sieur de Monts this spring was studied as part of a larger, island-wide study of beaver family size and distribution. The beavers were observed using remote motion-activated cameras, and for two nights in July from a tree directly above their dam by volunteer Erickson Smith (youth).



Photos and videos of collaborative dam building and other beaver activities such as grooming were taken during the nights of observation. Finally, to be absolutely sure of the family size, the beavers were live-trapped and released after their capture. The adult, two yearlings, and this year's kit are the second largest family group observed in the island-wide study, after a family living adjacent to Witch Hole Pond. This family group will not only contribute to a family group size estimate for Acadia's beavers, but also gives the park important information regarding the distribution of beavers throughout the island.



Bat Netting and Telemetry

A team from the Biodiversity Research Institute has been working in Acadia National Park this summer to net bats and equip them with transmitters, both to locate summer maternity roosts (where females with young congregate) and winter hibernacula (where all cave-dwelling bats retreat to for the winter). Maternity roosts are important places to protect as whitenose continues to permeate the bat populations of Acadia: by protecting maternity roosts, Wildlife can ensure that bats are producing offspring in whitenose-free areas, which is essential for the recovery of their populations. Identifying winter hibernacula will allow the Park to protect bat habitat against whitenose syndrome, as well as better understand the seasonal movements of bats on Mount Desert Island. Volunteer Erickson Smith (youth) assisted BRI and Wildlife employees with radio telemetry in July to track bats and attempt to locate maternity roosts (which was successful).

Sieur de Monts has been one of the locations where BRI has been mist-netting for bats. While they were unsuccessful at catching bats in July to search for maternity roosts, in August they successfully captured four eastern small-footed bats (*Myotis leibii*) and one big brown bat (*Eptesicus fuscus*). The study is still ongoing, but Sieur de Monts and Cromwell Brook may prove to be a fruitful starting point for BRI to identify winter hibernacula on the island.

