Mid-Summer Update

South River Bird Study: Are we having fun yet?





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Screech Owls

<u>Objectives:</u> a) more adults Hg levels b) reproductive success c) follow fledglings

<u>Achievement:</u>

 a) 15 Contaminated and 15 Reference adults for 2005-2006 combined

One failed nest...

Mallards

Objectives: Blood and feathers from 15 contaminated and 15 reference adults

Achievement:

 Plagued by vandals and flood

- 11 contaminated and 9 reference adults
- Plus 5 juveniles



Sarah Folsom of Biodiversity Research Institute with Mallard "decoy" trap



Carolina Wren nest in a tube



Nestling Carolina Wren with a ligature being applied

Carolina Wrens

Objectives:

- a) Adult Hg levels
- b) Collect prey items using the ligature technique

Achievements: a) 34 Contaminated and 10 Reference adults for 2006 c) 75 prey items collected

• Still trapping and collecting prey items!



Belted Kingfishers

Objectives:

a) More birds from the South River

 b) Habitat availability in river reaches without kingfishers

Achievements:

- a) 20 South River adults for 2005-2006 (up from 4) plus 27 reference adults
- b) Mapped all potential and actual nest sites

Dan Cristol with 7 nestlings at Water Treatment plant. All 7 fledged before the cliff nest was obliterated in the late June flood event.

Objectives:

Compare return rate of contaminated and reference birds

Achievements: Approximately 50 adults returned; a very high return rate for any songbird study

3 nestlings returned out of >800!

Reproductive failures clearly up from 2005.

Tree Swallows



Tree swallow photographed in the act of hatching



Kelly Hallinger, NSF-biomath undergraduate field assistant, with a fledgling bluebird



Fledgling bluebird with transmitter

Eastern Bluebirds

Objectives: Follow and retrap bluebirds after they fledge

Achievements:

- 30 transmitters on 13 nests (1st brood)
- Caught 16 fledglings first round, 13 in second, 12 in third, 1 in fourth

• Still trapping!

Also:

Collected food items from 10 contaminated bluebird nests
Collected potential invertebrate prey items
First documentation of "second clutching" by tree swallows
Collected clutches from 3 contaminated and 3 reference: bluebirds, chickadees, swallows, wrens, kingfishers
Collected blood/feathers for isotope study