Annual Report of the Bowdoin Scientific Station 2000

Since the Last Annual Report

The big excitement of 2000 has been our efforts to stop a Nova Scotia company from harvesting rockweed on Kent Island. Even more alarming are new attempts to develop salmon aquaculture sites offshore. One proposal calls for a series of pens just 100 meters off Kent Island's east beach, stretching from the "Moustache" (eastern ledges) to the northern tip. Industrial fish-farming and unsustainable removal rates of marine algae, the base of the marine food chain, would have major impacts on the local environment, bird populations, long-term research projects, and Kent Island's special sense of "Wildness" (to use Thoreau's term). Moreover, they have little in common with traditional fisheries by local families, which have always been

more elegant than the old one, all the while conforming to Kent Island building codes. The end of the wharf was replaced and a new landing platform was added, completing the full-length renovation Mark had started 10 years ago when he first served as caretaker. Finishing touches were added to last year's renovations of the Hodgson House (paneled ceiling and a stove fashioned from an empty propane tank) and the Radio Shack (new east-facing window). No

one way Wilson's Storm-Petrels may save energy. Katie and Dov Lank (Simon Fraser University) presented a paper at the 2000 American Ornithologists' Union Meeting in St. John's,

Surprisingly, seedling densities were lower on Outer Wood Island (where hares are scarce) than on Kent Island, but sapling densities showed the opposite trend, possibly due to microhabitat differences between the two islands. Akane found a significant difference in the height of the lowest White Spruce branches between the two islands: the lowest branches on Kent Island are about the height of snowshoe hare standing on its hind legs, whereas the lowest branches on Outer Wood nearly touch the ground. In a series of choice experiments, Akane presented captured hares with a smorgasbord of island fare, designed to mimic winter food choices and

*** Plant ecology**

The round-leaved sundew, Drosera rotundifolia, is an insectivorous plant common in the acidic and nutrient-poor bogs around Kent Island. In addition to her

Laura, an accomplished cellist, solved the transport problem and brought a violin instead, which she played as if it were a cello. Nina Murray and Katie Mauck piped in with their flutes. Kevin wailed away on his harmonica. The Kent Island Fashion Show and Review is fast becoming an island tradition. Mark Murray won best of show with his accurate portrayal of Chuck, complete with caribou-adorned sweater, glasses, and hard hat. Haute cuisine included a delicious array of Japanese dishes thanks to Akane's willingness to assume the role of chief cook. Bottle washing was a communal effort, as always. Games included Fictionary, Balderdash, and spoons, and Chuck impressed everyone with his ability to name all the countries in Africa and South America in both alphabetic and geographic order. Bill countered with a song reciting all fifty states, as learned in fifth grade. Ross Mauck introduced the rules of Jinx to one and all. Bill employed his digital video camera in documenting Kent Island life with good effect. We are still waiting for the director's cut.

Susie, Katie and Ross Mauck arrived in mid-June, whereupon Susie re-arranged the furniture in the Warden's house. Bob Cunningham walked in soon afterward, shook his head twice, and remarked that it had been 40 years since it looked like that. The Fourth of July saw the traditional beach clean-up along with a candlelight and sparkler rendition of "God Bless America" in a pea-soup fog in the dark. On the nautical scene, numerous trips to Outer Wood Island provided students with a turn at the wheel of our boat, the Ernest Joy, as well as camping opportunities for Akane and her helpers (Sherri, Robin, and Anna). Sherri paddled her kayak in the Basin and Kevin turned the dinghy (a.k.a. the "Chuck") into a sloop with great success, although she left something to be desired in terms of leeway. Russell led an ex (sn) 9 (n) dition to tood

The last visitors for the season were a fresh group of first-year students on their pre-orientation expedition and Nat's Ecology class field trip. Julie Ellis, a graduate student at the U. New Hampshire, accompanied us to investigate the effect of muskrat herbivory and gull damage on plant populations. During the stormy late fall and winter months, Russell checks on the island monthly (occasionally returning to Seal Cove with a few Black Ducks for dinner), and at the time of this writing, he is planning to take Naomi Schalit, an intrepid reporter from Maine and National Public Radio, on what promises to be a wild January outing as part of her coverage of the pressures of rockweed harvesting and aquaculture development in the Gulf of Maine.

Addenda to the List of Publications from the Bowdoin Scientific Station

More than 150 articles have been published in peer-reviewed journals based on research on Kent Island. Papers with an author who was an undergraduate at the Bowdoin Scientific Station are indicated by asterisks. Numbers in parentheses represent Contribution Numbers from the Bowdoin Scientific Station.

**Futamura, C.W., and N.T. Wheelwright. 2000. The mosses of Kent Island, New Brunswick. Northeastern Naturalist 7: 277-288. (139)
** K. Apigian, and N.T. Wheelwright. 2000. Forest ground beetles (Coleoptera: Carabidae) on a boreal island. Canadian Entomologist 132: 627-634. (142)
**Mauck, R.A., and K. Harkless. The effect of group membership on hiding behavior in the northern rock barnacle (Semibalanus balanoides). Animal Behaviour (in press).
**Conrad, K.F., P. V. Johnston, C. Crossman, B. Kempenaers, R. J. Robertson, N. T. Wheelwright, and P. T. Boag. 2001. High levels of extrapair paternity in an isolated, low-density, island population of tree swallows (Tachycineta bicolor). Molecular Evolution. In press.
Wheelwright, N.T., and J.J. Templeton. Development of foraging skills and the transition to independence in juvenile Savannah Sparrows. Animal Behaviour. In review.