#### St. Andrew's School

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Art in Biology: A Naturalist's Approach

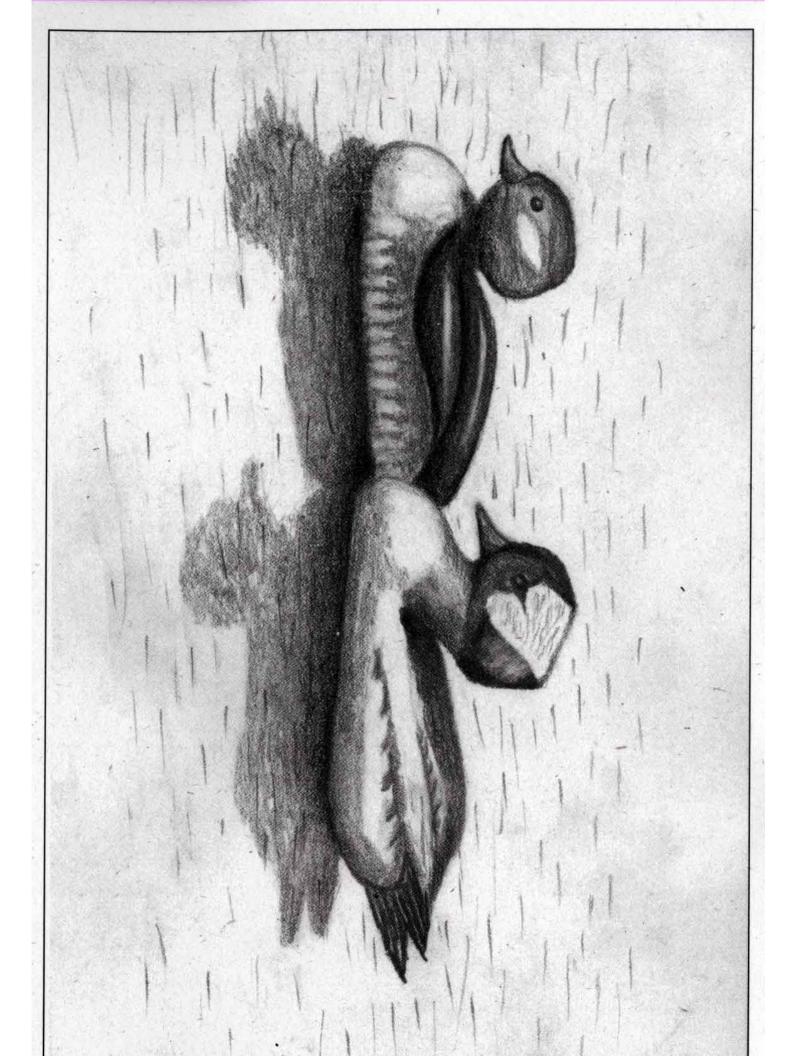
Art in Biology is designed to improve the student's power of observation; we hope to further awareness and appreciation of the natural world and ability as artists. Much of class time is spent outdoors, walking trails around Noxontown Pond, exploring its recesses from the biology barge, visiting the School's walnut grove and nearby fields and ponds like those at Bombay Hook National Wildlife Refuge, as we attempt to capture on paper some of the natural scene around St. Andrew's. We use various media (e.g. pencil, pen, watercolor, charcoal), lots of field guides, and Claire Walker Leslie's *The Art of Field Sketching* for our study.

Demond Baine, Art Instructor Peter McLean, Biology Instructor

2004-2005 Students

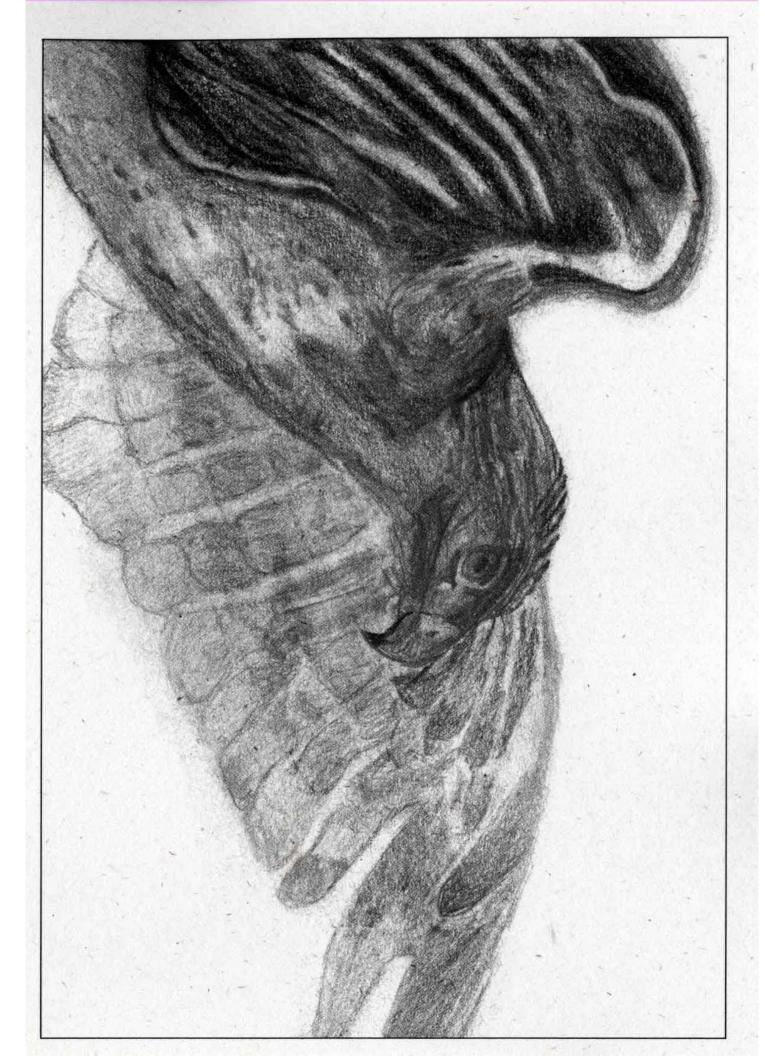
Nicholas Manice '05 Christopher Lyons '06 Shabazz Stuart '07

These cards are printed with vegetable-based ink on Genesis Snow, a Nexfor Fraser paper made from 100% de-inked post-consumer recycled fibers.



### Buffleheads (Bucephala albeola)

We saw these diving ducks at Bombay Hook National Wildlife Refuge. They are very small and cute and seemingly shy. I have decided that Buffleheads, a male and female drawn here, are my favorite kind of waterfowl, and I wouldn't mind adopting one if it weren't for realizing its need to be free and part of the natural scene.



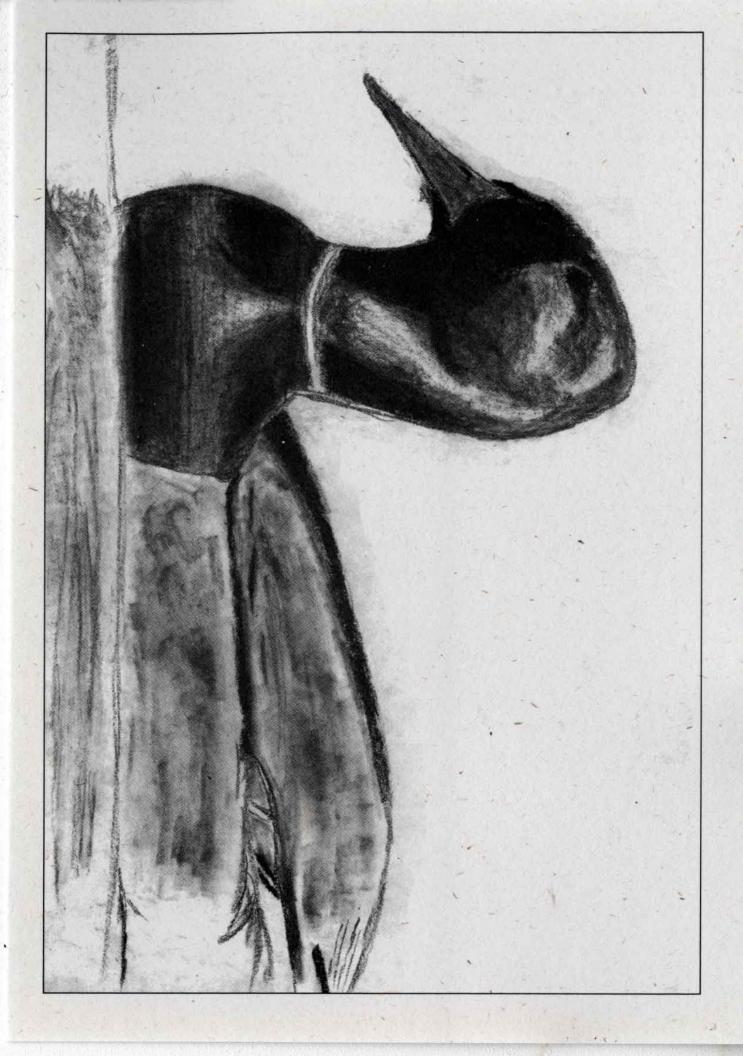
## Red-tailed Hawk (Buteo jamaicensis)

The Red-tail's piercing stare caught my attention; the heavy brow, perhaps for shading, contributes to this look. This large raptor perches at the tops of large trees from where it searches open fields for rabbits, snakes, and small birds. Broad shoulders, razor-sharp beak, and needle-like talons also contribute to a sense of power in the Red-tail.



## Northern Shoveler (Anas clypeata)

Seen swimming in the freshwater ponds of Bombay Hook National Wildlife Refuge, this drake or male takes advantage of its large, flat shovel-like bill as it dabbles in the shallows feeding on vegetation and an occasional mollusk. The Shoveler's bill exemplifies specialization in nature, I have come to admire.



#### Mallard (Anas platyrhynchos)

A large portion of my journal is devoted to ducks, and I thought it would be cool to draw one in charcoal. I admire the distinctive green head, the white ring around the neck, and the deep brown of the upper breast; these bold colors contribute to successful reproduction which can involve a form of rape.



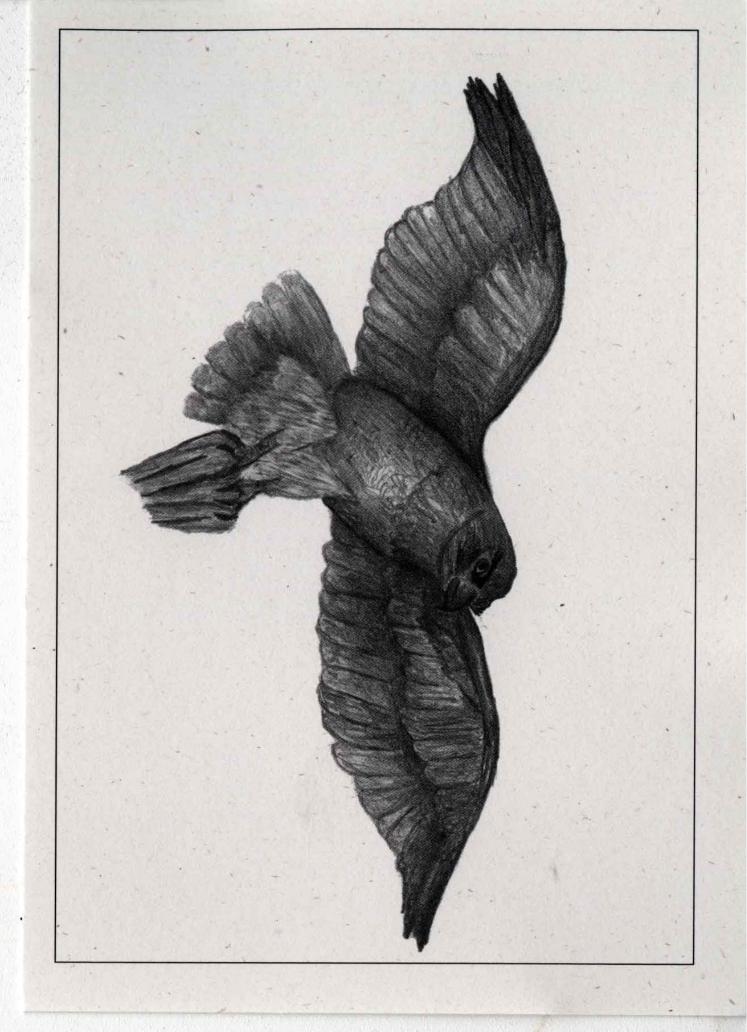
## American Kestrel (Falco sparverius)

open fields. are usual prey. Kestrels typically perch on telephone lines from where they hunt amazing that such a small bird can kill something like a mouse; however, insects Refuge; this falcon, drawn life-sized, seems surprisingly small for a predator. It's We saw a colorful, male Kestrel on our way to Bombay Hook National Wildlife



# Northern Cardinal (Cardinalis cardinalis)

The lofty crest, brilliant red, and seeming proud and determined look of this large finch caught my eye. The male's color likely contributes to breeding success, whereas the female's colors are more subtle, perhaps providing protection at the nest. Cardinals were among the first birds seen by our first headmaster, Reverend Pell, and the headmaster's backyard continues to be a haven for this handsome bird.



## Red-tailed Hawk (Buteo jamaicensis)

Red-tails are found all over School lands. You can see them soaring over the fields searching for rodents and small birds. I especially admire the Red-tail's graceful, effortless soar and their fierce look, perhaps an angry glare. These large raptors mate for life, and some migrate to Central and South America in the late fall.