

EARLY BIRDING

Themes: Wildlife Study, Recreation, Inspiration, National Parks

Participants: Middle School students

Standards: SD: 6.N.2.1; 7.N.2.1; 8.N.2.1

NE: 8.1; 8.2

Overview: This lesson is designed to introduce Middle School level students to basic bird identification to some of the common, and a few rare but easily identified, birds and waterfowl found along and around the Niobrara National Scenic River. Students will construct mobiles representing these large birds and common waterfowl writing both the common and scientific names on the topside of the bird or waterfowl. Using the technique of layering color with colored pencils, students will approximate the colors of the birds' plumage. This will help the student to identify these birds on the wing as well as help them to remember common and scientific names.

Following a trip to areas along the Niobrara National Scenic River such as Fort Niobrara National Wildlife Refuge and Smith Falls State Park students can observe and identify some of these birds and waterfowl and observe and identify other types of avian life. Upon their return to the classroom they can research the birdlife they have observed and construct new mobiles as aids to identification.

Materials Needed:

Copies of "Birds and Waterfowl" patterns (with this lesson)

Scissors

Colored pencils

White soda straws or long thin twigs

Sewing thread and needles

Tape

Copy of a field guide for birding

Stiff drawing paper (for follow up activity)

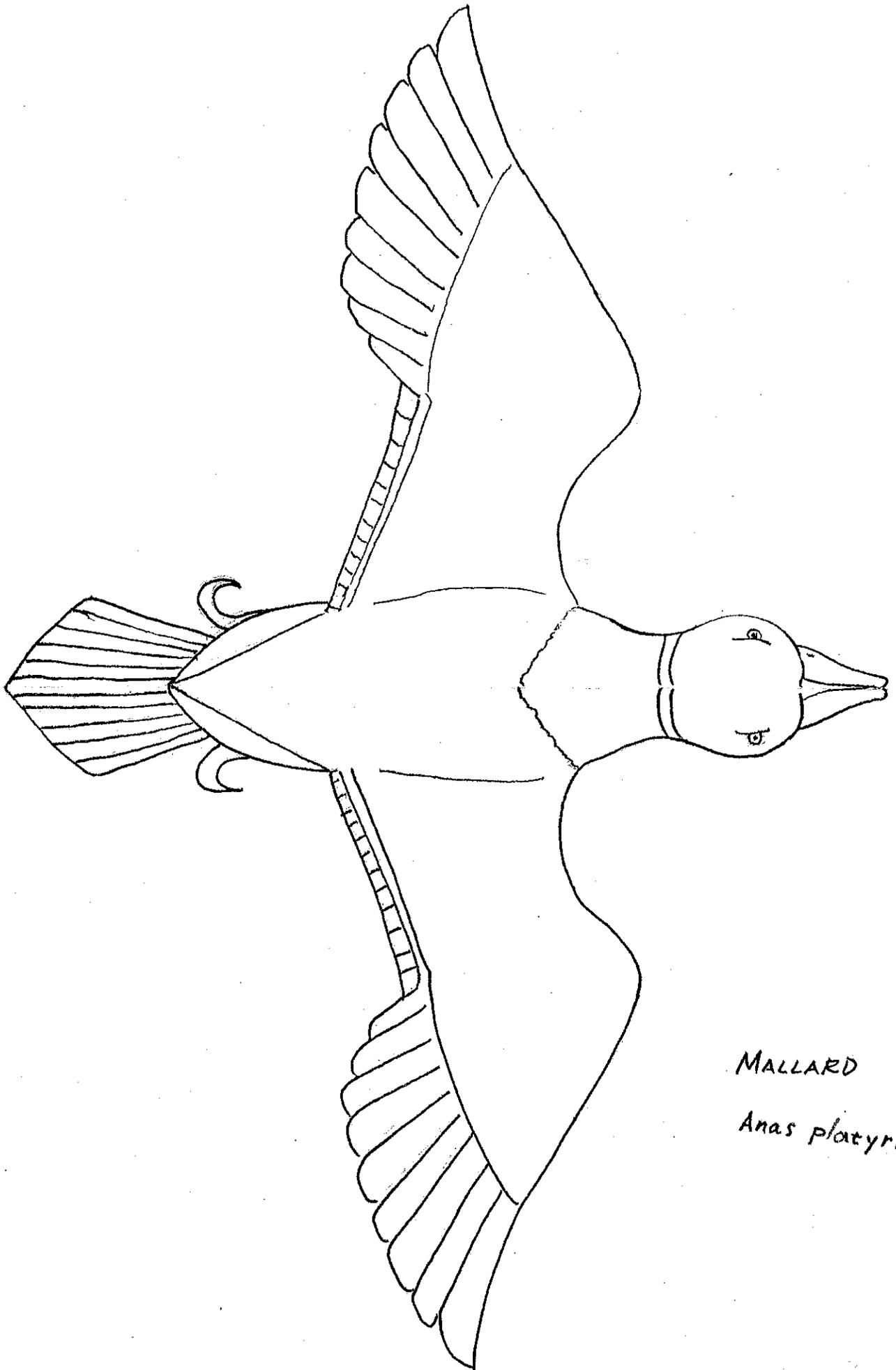
Process for Mobile: (Refer to field guide to view color schemes for birds and waterfowl.) Using the colored pencils color plumage by layering colors beginning with the lightest and moving to the darker hues. To create effects blend colors by going from yellow to yellow green and so forth to blue and indigo blue allowing some of the color from the previous layer to show through. You can layer a bit of brown or blue with grey to keep the grey from appearing too flat. A bit of brown over red can achieve a better match to some plumage as can a bit of dark blue added to black. Cut out birds from pattern background paper. On the blank side write the common name on one wing and the scientific name on the other. Fold birds in half by matching wings. Knot the end of a length of sewing thread and run the thread from under the neck of the bird (leaving quite a bit of slack) to just forward of the tail to make a triangle with the thread making two sides and the bottom of the bird making the third leg. At the apex of the thread legs of the triangle tie the ends into a loop. If using soda straws cut into the end of the straw at a slight angle and slide the loop into the cut sealing the end with a piece of tape to keep the loop from sliding out. Do the same at the other end of the straw with a second completed bird. If using twigs either split the end of the twig with a craft knife or use a bit of tape or fast setting glue to hold the

birds strings in place. When at least two sets of bird assemblies are complete find the balance point of each and tie a longer thread from one balance point to the other. Create a loop at the end of the thread and hang using a paper clip for a hook. In order to get birds to balance side-to-side curve or fold wings down a bit until balance is achieved.

Exploration: Arrange a trip for your students to an area along the Niobrara National Scenic River such as Fort Niobrara National Wildlife Refuge or Smith Falls State Park. Take field glasses and field guide. Explore areas around the river identifying and noting the types of birds found there.

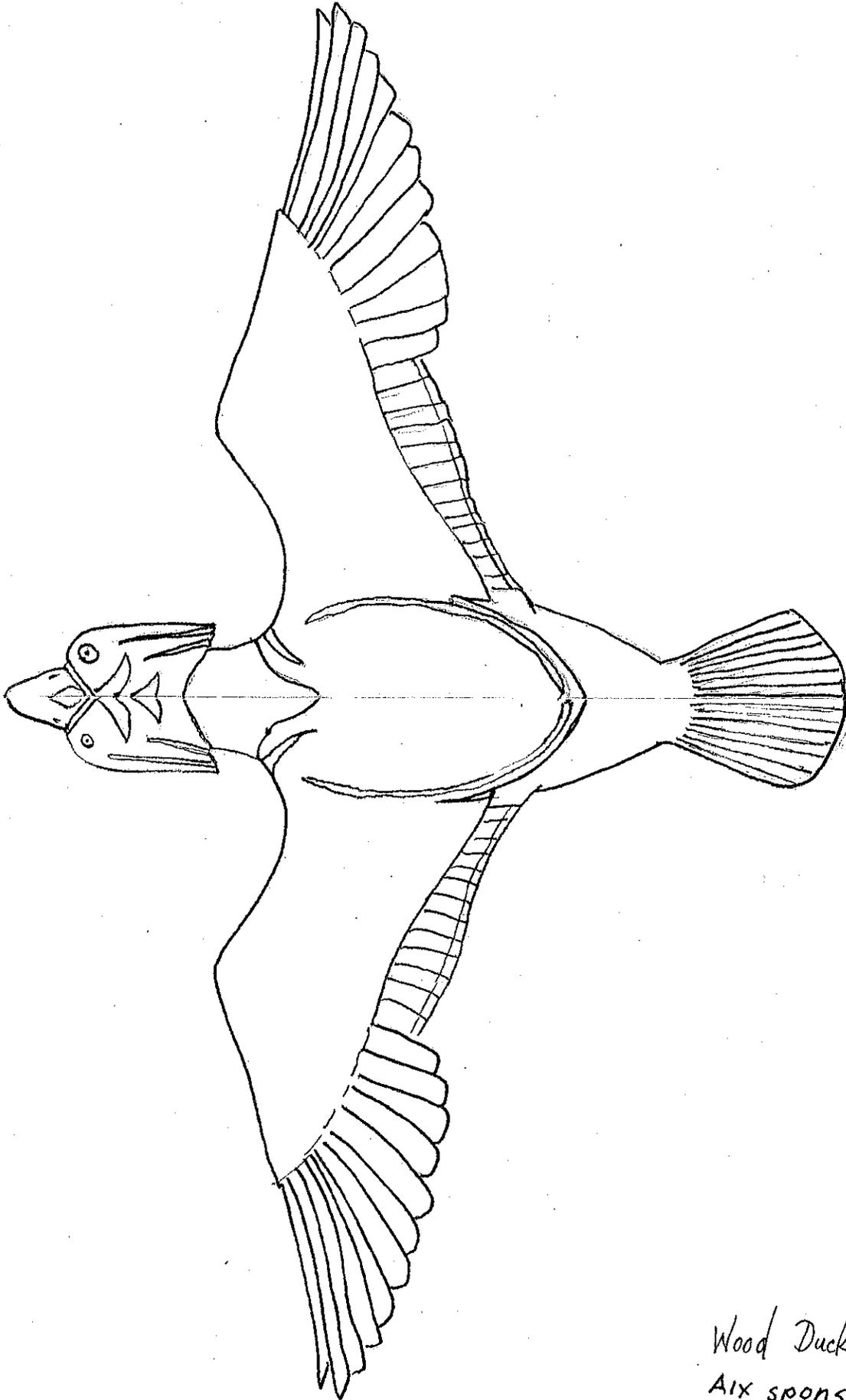
Post-Exploration Activity: Upon your return to the classroom create your own mobile based on your observations. To create the birds for your mobile fold a 6" X 11" sheet of stiff drawing paper. This size will allow for the length of the wings. Draw a silhouette from a side view of a bird that was observed. The bottom or midline of the body should be at the fold of the paper. Open the paper and draw the other half of the bird on the other half of the paper. When drawing is complete go over outline with a fine point permanent marker adding details and colors (refer to field guide).

Create mobile according to instructions above.

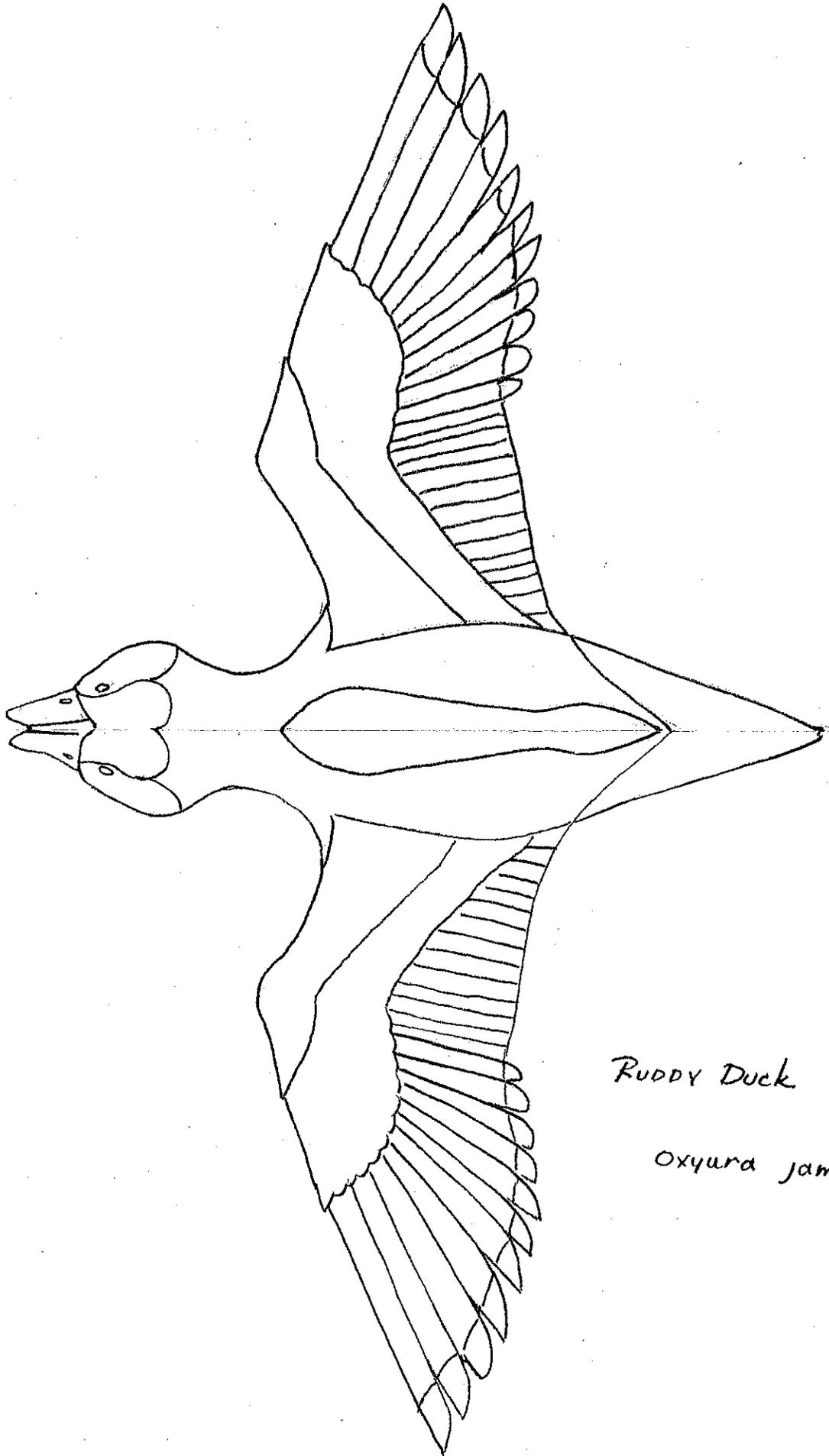


MALLARD

Anas platyrhynchos

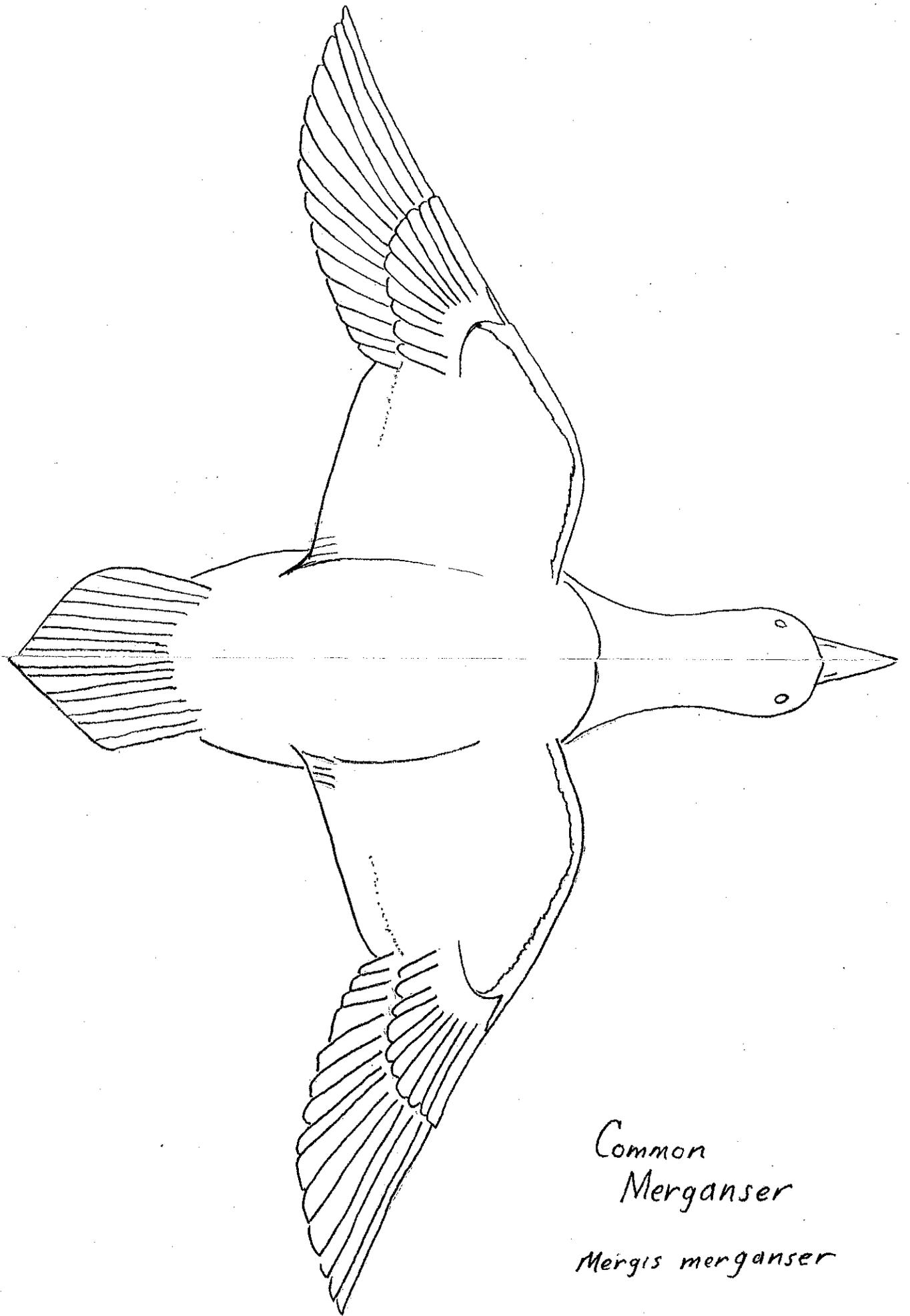


Wood Duck
Aix sponsa



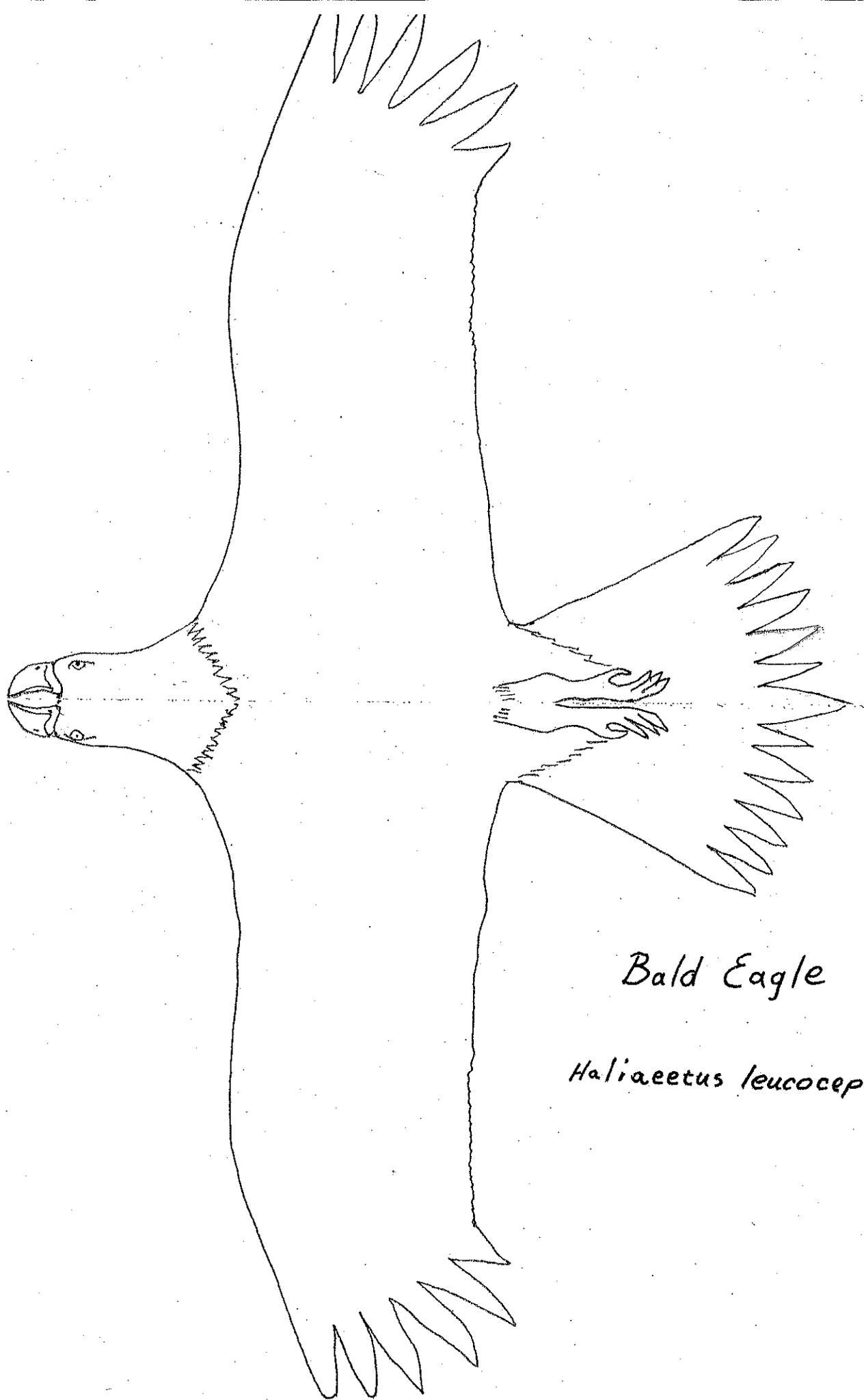
Ruddy Duck

Oxyura jamaicensis



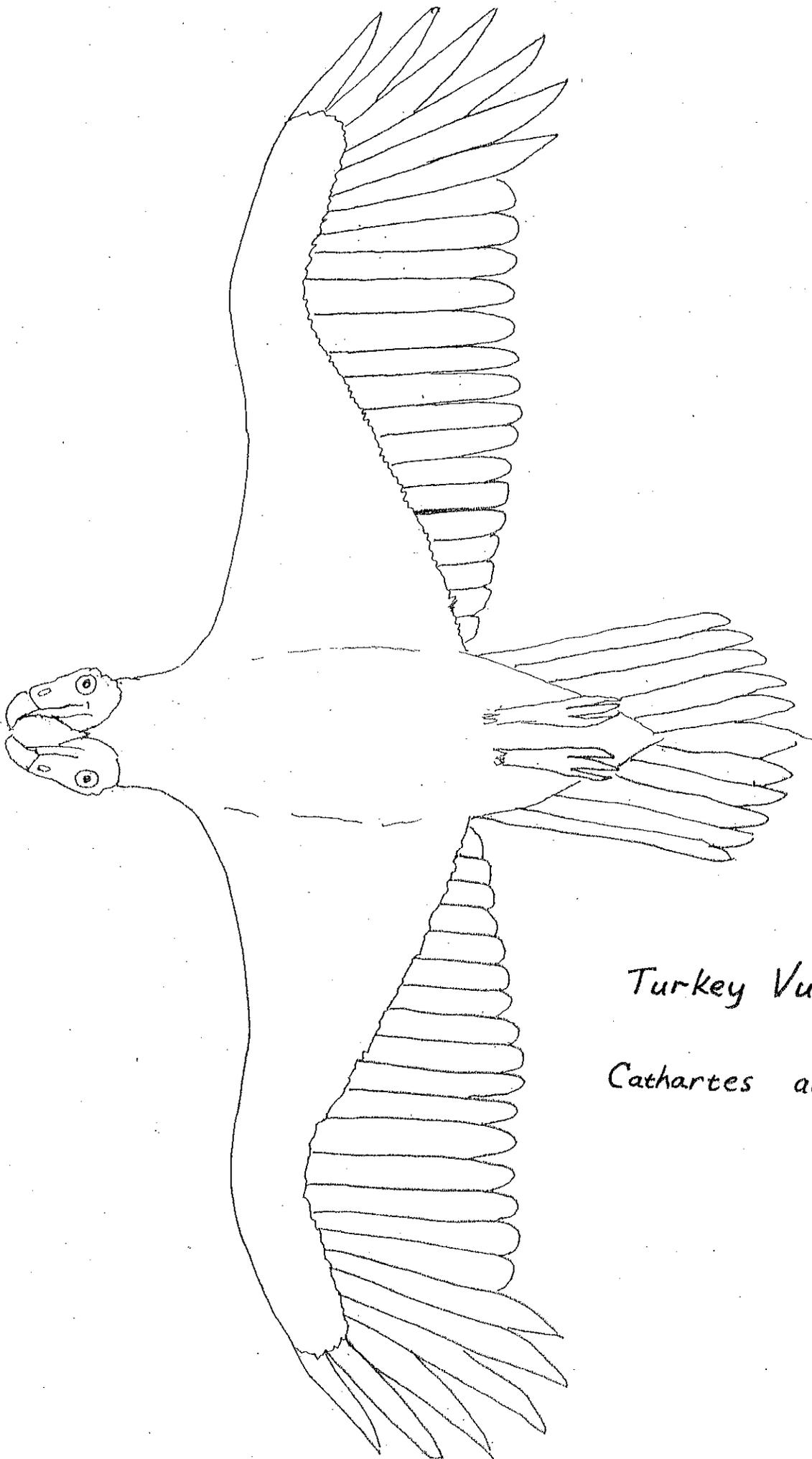
Common
Merganser

Mergus merganser



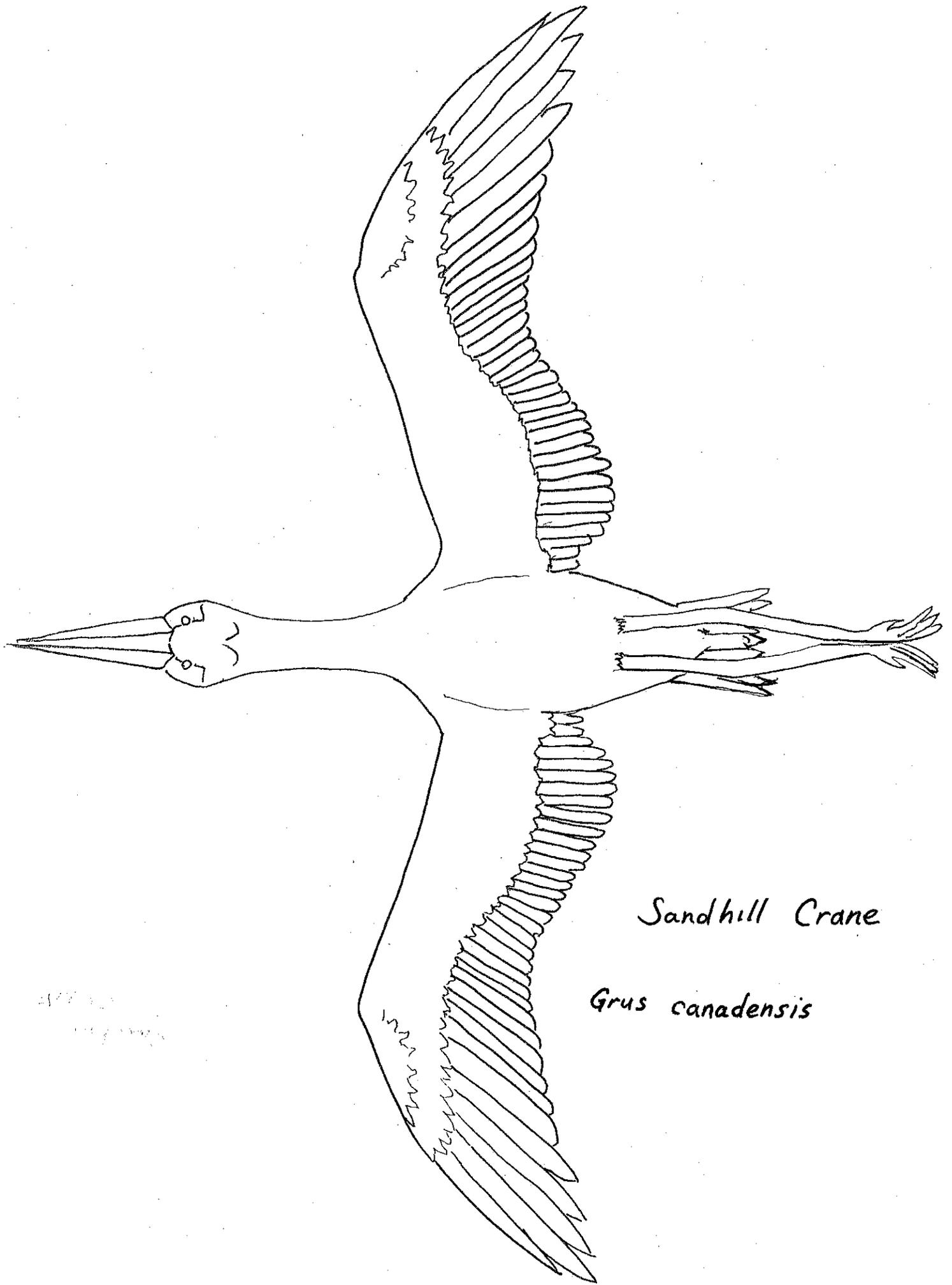
Bald Eagle

Haliaeetus leucocephalus



Turkey Vulture

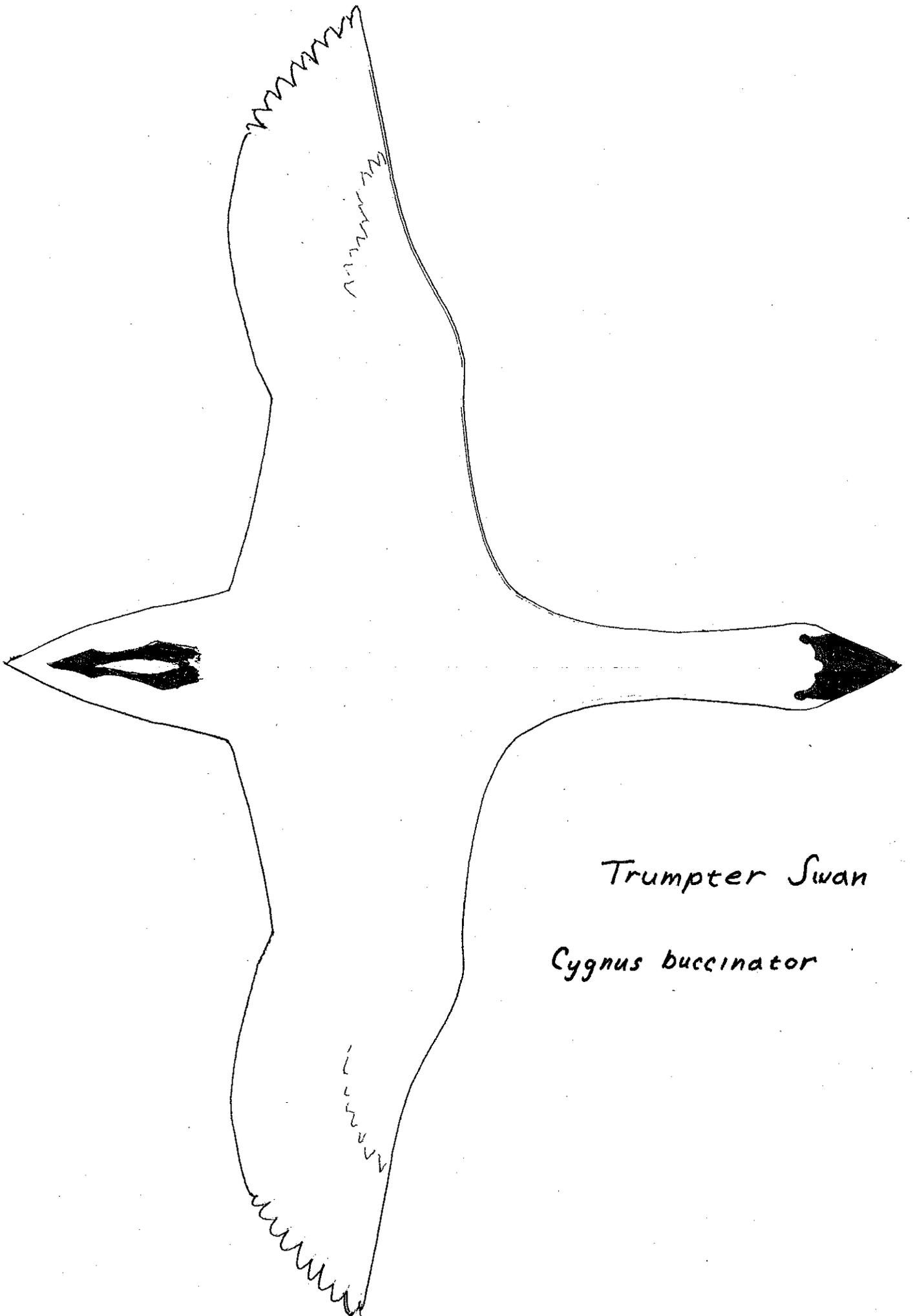
Cathartes aura



Sandhill Crane

Grus canadensis

1877
1878



Trumpeter Swan

Cygnus buccinator