

HUMBER ARBORETUM ECO CENTRE BIRDS



INTERESTING FACTS

- ✦ A bird's normal body temperature is usually 3-4°C hotter than a human's. Up to three quarters of the air a bird breathes is used just for cooling down since they are unable to sweat.
- ✦ Turkey vultures can help human engineers detect leaks in natural gas pipelines. A chemical that smells like carrion is injected into the line and the vultures circle above the leak looking for dead animals to eat.
- ✦ The skeleton of birds and their internal organs are reduced in weight and size to make them lighter as an adaptation to flight. The bones are hollow and thin walled. Many organs that are paired in other vertebrates such as kidneys, are reduced to one in birds.



COOL ACTIVITIES

MIGRATION BLUES

- ✦ Define the boundaries around a large open area. One end of the area will represent the birds' nesting grounds (Southern Ontario) and the other will represent their winter grounds (Central or South America). Place hula hoops within the open area. These will represent safe migratory stopping grounds. Within each hula hoop scatter items to represent food.
- ✦ Discuss some factors that influence a successful migration then pick a few students to represent obstacles that a migratory bird might encounter (airplane, skyscraper, transport truck, predatory birds). Assign different movements for the "obstacles".
- ✦ The goal of the game is to successfully migrate south and back again. To keep up their strength they must gather food at the stopping grounds. If they are tagged by an obstacle they are out until the next round. They are safe in the hula hoops but for no longer than 20 seconds. You can change scenarios by adding or taking away obstacles and/or feeding areas.

REVIEW QUESTIONS

1. What is the one thing that makes a bird a bird and how many types of these do birds have? (ANS: Feathers are what makes a bird unique from other animals. They have three different types of feathers including wing feathers, tail feathers, and body (contour) feathers.)
2. When Arboretum staff refer to the term "bird wash" what are we talking about? (ANS: Birds only have one exit hole for waste. The cloaca (*klo-A-ka*) is the end of the line where waste from the digestive and urinary tract, the "pooh and pee" are collected before being dumped. This is why we refer to it as "bird wash" (usually white) because the waste is not separated and therefore cannot be referred to as "scat" (the scientific word for animal feces.)
3. Why do some male and female birds have different coloured feathers? (ANS: In species where the female raises the young on her own, male birds will have brightly coloured feathers. In species where both parents take care of the young, feather colour is very similar in male and female because they both need to be camouflaged to protect the young.)

