## Birds of a Feather Flock Together By Bruce Buckle

European starlings are not among my favorite birds. But a **murmuration** of thousands flying synchronously is truly a wonder of nature that inspires awe. Wonderment, in turn, leads scientists to investigate how starlings twist and turn on a dime in such close proximity without colliding. Advanced computer modeling suggests the birds, "like drivers on a freeway," eye neighboring birds in the flock to maintain their tight spatial relationship. But just as we "feel" a passing tractor trailer on a highway, other senses may also help them navigate seamlessly through the sky.

A flight flock of geese is easily recognizable and a harbinger of the changing seasons. On land and water they are a **gaggle**, but in flight they are a **skein**. Their familiar "V" formation facilitates long distance migratory flight by taking advantage of upward air movement, or upwash, created by the bird ahead. It also enhances each bird's ability to communicate as they rotate positions within the flight flock. Scientists, by studying other migratory birds that fly in "V" formations, have begun to unlock the mysteries of how birds position themselves in the formation, and flap their wings precisely to save energy by taking maximum advantage of the upwash.

In recent years a **murder** of migrating crows roosted during the winter months in an old oak tree next to City Hall. Needless to say they created quite a mess on the sidewalk! Led by Maddi Dunlap, a group of Audubon volunteers gathered regularly to chase them from their roost and relocate them to less intrusive locations in the city. Our efforts affirmed what science already told us; that crows are highly social and intelligent creatures. While Lycoming County has its share of resident crows, these migratory flocks roost in the city for the protection and warmth of downtown lights.

It's not uncommon to see a small flock of crows **mobbing** a red-tailed hawk as it circles in the sky. One of the most important reasons birds form flocks is protection from predators. "Mobbing" is a tactic crows, as well as other birds use to drive away potential threats. Generally, there is safety in numbers so bird flocks are less vulnerable to predators. Just listen to the birds in your yard sound the alarm when a stray cat comes nearby. Communal nesting sites, or **rookeries**, also provide safety in numbers for young birds of species like the Great Blue Heron.

A number of birds form **foraging flocks**. When a cedar waxwing discovers a food source, such as a native tree or shrub like a serviceberry or winterberry that bears small fruit, it's typically joined by others in a flock. Mixed flocks of chickadees, nuthatches, and even downy woodpeckers enable a variety of birds to take advantage of a food source, especially during the winter months. Birds look to each other to identify food sources.

A flock of American Goldfinch feeding in a bed of sunflowers, or other native seed bearing plants in your yard is one of the many joys of birdwatching. Flocks also gather at feeders filled with nyger seed. Unfortunately this flocking behavior also has its downsides, as we were reminded this summer by the mysterious disease that afflicted a variety of birds neurologically. Congregating can spread contagious disease and reports of the disease in our area led Lycoming Audubon to recommend that bird watchers take down their feeders to prevent the spread. So while flocking behavior is largely beneficial for most birds, it does have its disadvantages.

It's that time of year when birds are starting to **flock up**. The spring and summer breeding season is past and our feathered friends are preparing for fall and winter. Whether to conserve energy during migration, to seek warmth or protection from predators, to find food to eat, or maybe just for good company, flocking is an important survival strategy for many bird species. And while there is much pleasure from spotting a solitary songbird singing atop a sturdy stalk in an open field, there is as much to enjoy in a flock of foraging American robins, or even a murmuration of starlings.



