# Grandfather Mountain Hawk Watch



Thank you for participating in the Grandfather Mountain Hawk Watch! Raptor migration throughout the country is an amazing spectacle to observe. During the peak of the broad-winged hawk migration in mid-September, thousands of hawks can be seen around Grandfather Mountain on peak days. More than a dozen species can be seen passing over the peaks of Grandfather throughout the migration season. The Grandfather Mountain Hawk Watch is a systematic and organized effort to collect standardized migration count data about all diurnal raptor species passing over the mountain. The count season runs from September through November, but the primary focus is the month of September. Grandfather Mountain is one of 200 registered sites across the continent recognized by the Hawk Migration Association of North America (HMANA). The count information is uploaded to a database (hawkcount.org) that tracks all entries from the 200 sites around the United States, Canada and Mexico. This data provides critical information about migration routes and population increases or decreases. This valuable information helps identify fluctuations and trends in the overall and regional movements and populations of migrating raptors. Beyond the data collected at the Grandfather Mountain Hawk Watch, we also hope this effort will introduce people to hawk watching and help educate them about the importance of conservation efforts to protect birds and bird habitat through fun and enjoyable time spent outdoors.

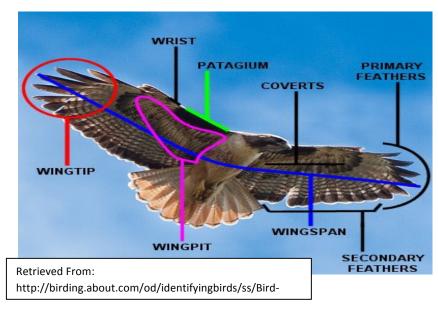
#### **Hawk Migration**

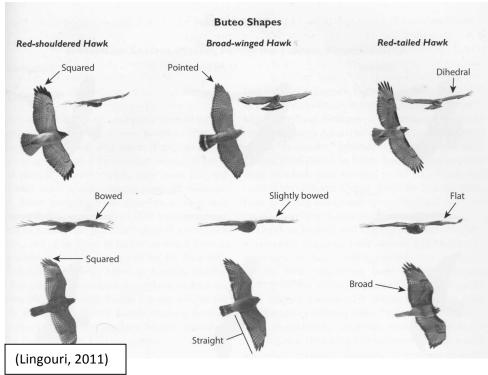
Each spring and fall, migration occurs across North America and includes a large number of raptor species traveling north to breeding grounds in the spring and south to their wintering grounds. Many species concentrate along typical migration paths created by mountain ranges, shorelines, and other natural landscape features. Ridge top counts such as this one can be very productive locations for observing raptors as they pass through in both spring and fall seasons. At Grandfather Mountain, we only actively conduct the hawk counts in the fall season. HMANA's site www.hawkcount.org is a great resource for watching migration take place and to help predict raptor activity in a particular location or region by looking at data from other hawk sites. The Rock Fish Gap site in Northern Virginia seems to be nearly one day's flight away from Grandfather Mountain in most weather conditions. Grandfather Mountain has the potential for high numbers within 24 hours after a high count is recorded at Rock Fish, but this is dependent on a variety of factors. Many of the raptors that pass by Grandfather are heading to wintering grounds as far away as South America. Others will only migrate to the Southeast and overwinter in mild areas of the southern United States. During the hawk count, we also make other interesting observations on weather and other migrating fauna. You may notice dragonflies. butterflies, and migrating songbirds at the count as well. While other migrating species are not the focus, we do try to make detailed comments each hour about the variety and quantity of other migrants observed at the hawk watch.

### **Identification Tips**

Identifying raptors on the wing at high altitudes and at great distances can be a challenge. It takes lots of practice and time to study each bird. IT IS NOT POSSIBLE TO IDENTIFY EVERY BIRD THAT PASSES BY THE COUNT! This is important to note before the count and accept very early in your watching career! It can become frustrating when a bird doesn't give you enough of a view of its characteristics to make an accurate assessment of its species. With time and practice, you can learn more traits about any given species that will allow you to detect it at greater distances in a shorter period of time and with greater accuracy. Many accomplished watchers take their time to observe a bird before making an identification to see as many

characteristics as possible. With hawk watching, it's more about looking at the bird as a whole than by any one characteristic. Watchers take note of a bird's flight pattern, flight behavior, wing shape and characteristics, head shape and characteristics, tail shape and characteristics, and many other factors to determine a bird's identity. While you are beginning to develop your skills at hawk identification, it's important to continue to observe each hawk even after you are confident in the identification to look for other traits that may help with future observations. Once you become proficient in species identification you can take it to a deeper level of identifying male/female and various color morphs within a species. It is helpful to know the proper terminology of a bird's plumage and anatomy in order to accurately communicate to other birders what feature you might be seeing in order to confirm or disprove a debated identification. The more viewers' eyes on a bird, the more likely it is to be accurately identified. It's helpful to practice identification of hawks from a distance as often as possible to improve your skills. A hawk watch is a very humble place and it's important to contribute to the positive atmosphere. Please be helpful in creating an amicable environment for other watchers and visitors that stop by. Be encouraging and patient as others continue to develop their skills and learn about hawk migration and identification.





### **Scanning the Skies**

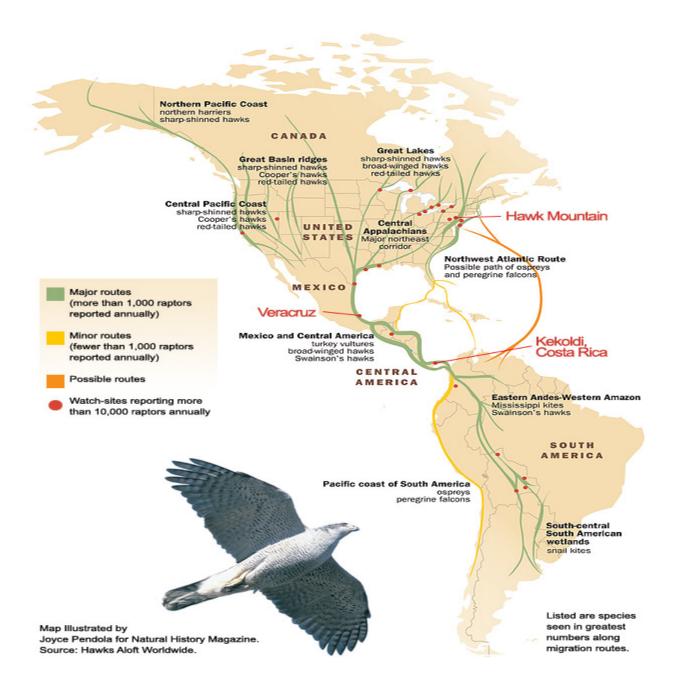
Scanning with binoculars and spotting scopes is an important and never-ending part of the hawk watch. Everyone onsite should be scanning the skies continually looking for raptors migrating through. Sometimes birds are easily seen just over the ridge and can be viewed without binoculars; other times, you may require the help of a spotting scope to spot far distant birds. Weather conditions will dictate the migration route the birds choose to take around Grandfather Mountain on any given day. This is why it is very important to take frequent weather assessments that can give you clues as to which direction the hawks may move around Grandfather.

Over time, you may develop your own techniques for scanning the sky, but one effective method is to pick a landmark such as MacRae Peak and begin scanning east or west of the landmark you choose. Start at the horizon and scan at horizon level as far south as you comfortably and safely can. Once you have reached the maximum scanning distance horizontally, move up vertically one glass view in your binoculars and continue scanning left to right. You can also scan vertically moving left or right one glass distance each time you view the horizon. Think of scanning the sky through the same process as how you might mow a lawn with slight overlap of each passing of the mower over the grass to get complete coverage. Do the same with your binoculars to try to gain as much coverage of the sky as possible with each scan.

Repeat the scanning process until you have covered the sky in a section of the viewshed. Once you have covered it well, choose another portion of the sky to scan. Move slowly and meticulosly so you don't miss any birds. Periodically break away from the scan to look for close birds with your eyes. It's easy during scanning to miss the obvious birds directly overhead. Once you spot a bird, don't pull your binoculars down. Keep your eyes on the bird and try to locate landmarks in your field of view such as a mountain peaks, a building landmark in the binocular field of view, a jet contrail, or cloud characteristic that might help others spot where you are looking. With practice as the spotter and as a bystander trying to locate a bird in the sky spotted by others, you can become quite good at locating birds even in nearly blue sky conditions. Partly cloudy conditions are best for the hawk watch. Birds become easily seen when sihouetted by a white cloud in the background. Full cloud cover can cause counters to miss birds flying through or above the clouds, and blue sky days can make it nearly impossible to see high-flying birds.

When you get tired of scanning the skies, which is inevitable, try looking around without binoculars for a bit, get hydrated and eat a snack, check the weather, or offer to take on other duties at the hawk site. While looking around without binoculars, try scanning any clouds or just above ridgelines to see if you spot any kettles or individual birds that are visible with the naked eye. Working in shifts with other watchers helps keep good coverage in the sky. It is very hard for one person to watch everything all the time, so the more eyes on the sky, the better coverage we will have. If you notice everyone is scanning in one direction, try to make a point to scan other areas of the sky. If you notice local birds in the area that are not migrating, such as vultures or resident red-tailed hawks, keep an eye on them as well. Often, migrating raptors will key off them to locate the best thermal activity in the area. Local birds can be confusing and difficult to determine whether or not they are migrating or sticking around. Observe and take note of flight direction and behavior to help key in on local birds. Watchers who are at the site frequently will be able to pick up on local birds and help you learn to identify when a local bird is hanging around the site.

## **Raptor Migration Routes**



#### **References and Resources:**

Dunn, P., Keller, D., Kochenberger, R., (1984). Hawk Watch: A Guide for Beginners. Cape May Bird Observatory/ New Jersey Audubon Society, Cape May Point, NJ.

Gordon, T., (1991). Pilot Mountain Hawk Watch: How to Watch Hawks handout. Forsyth Audubon Society, N.C.

Linguori, J. (2005). Hawks from Every Angle: How To Identify Raptors in Flight. Princeton University Press, Princeton, N.J.

Linguori, J. (2011), Hawks At a Distance: Identification of Migrant Raptors. Princeton University Press, Princeton, N. J.

Sibley, J. (2012), Raptors of Eastern North America. Steven M. Lewers & Associates Publishers, Wilton, NH.

Hawk Migration Association of North America http://www.hmana.org

**HMANA Hawk Count Data** 

http://www.hawkcount.org

(NC sites) http://www.hawkcount.org/sitesel.php?country=USA&stateprov=North Carolina

Raptor Education Resource

http://www.wbu.com/education/birdmigration.html

American Birding Association Migration Resource <a href="http://blog.aba.org/2010/12/ebird">http://blog.aba.org/2010/12/ebird</a> migration maps.html

Hawk Migration Map

http://www.hawkmountain.org/raptorpedia/migration-path/page.aspx?id=352

High Country Audubon Society

http://www.highcountryaudubon.org

Forsyth Audubon Society Hawk Watch information.

http://www.forsythaudubon.org/HawkWatch/HawkWatch.html

Carolina Raptor Center

http://www.carolinaraptorcenter.org/