

Girl Scouts of Southeastern Michigan

JUNIOR HAWKWATCHER PROGRAM

Daisies, Brownies, and Juniors

Sponsored by:
The Hawk Migration Association of North America (HMANA)
and the Detroit River Hawk Watch



INSTRUCTIONS

To earn your Junior Hawkwatcher patch at the Detroit River Hawk Watch, complete the activities in this booklet. Once completed, please take this booklet to a counter or hawkwatching volunteer at the site. Your work will be checked for accuracy and if found to be correct, the Junior Hawkwatcher patch will be awarded.



What is your name?		9 7'	
What is your age?			
Where are you from?			
What is your favorite bird?			
Have you been to a hawkwatch site befo			
Have you ever seen an eagle?			
THE HAWKWATCHER'S PLEDGE			
	, pledge to protect hawks	and birds. I can make this possible by not	
	and rat killer. I am becoming a	hawkwatch member and one way I can ma	ak
Senior Hawkwatcher Signature Requ	ired Below		
l, this hawkwatching program.	, certify that	has complete	d
Date			

BACKGROUND INFORMATION

The Detroit River Hawk Watch (DRHW) was established in 1983 under the leadership of Tim Smart, who served as the DRHW site coordinator for sixteen years. Smart had counted hawks for several seasons at Holiday Beach Conservation Area in Malden Center, Ontario, Canada. He knew that birds moving past Holiday Beach had to cross into Michigan near the Detroit region, so he scouted the area, trying to find the best and most consistent concentration of hawks. His efforts were soon rewarded with the establishment of two prime sites, the Lake Erie Metropark boat launch (the main site) and Pointe Mouillee State Game Area Headquarters parking lot (a secondary site), located just south of the Metropark.

A hawkwatch is designated to collect information about migratory raptors (birds of prey), which include eagles, falcons, vultures, osprey, harriers, accipiters, and buteos. These birds are often called "hawks," but the term "hawk" really refers to specific types of raptors. The common Red-tailed Hawk is a hawk (in the genus Buteo), but the Peregrine Falcon (in the genus Falco) is not, for example.

Most hawkwatches, like the Detroit River Hawk Watch, have a designated spot where hawkwatching and counting takes place. A dedicated group of hawkwatchers helps run the hawkwatch. Hawkwatchers are the people—usually volunteers—that spot, identify, and attempt to age and sex (tell if the raptors are male or female) each raptor that passes the hawkwatch site during the migratory seasons.

Every year since 1983, counters have patiently monitored the skies at the lower Detroit River and produced daily reports. You can find these reports, uploaded each evening from September 1st through November 30th, at www.HawkCount.org.

WHAT MAKES THE DETROIT RIVER HAWK WATCH SPECIAL?

The primary purpose of the Detroit River Hawk Watch is to count migrating hawks to monitor the health of their populations and to build a strong conservation community. These counts can be used to create a trend analysis—a study that determines whether hawk numbers are increasing or decreasing. Hawkwatching is also a fitting example of a high-quality citizen-science program. In a time when the natural world can seem increasingly distant in our lives, daily counts and data are a meaningful connection. The hawkwatch team members are the storytellers of this timeless phenomenon—cyclic migration that is as old as the Great Lakes—sharing the information they gather at

the hawkwatch site with anyone who accesses it online. DRHW values both the scientific integrity of the data as well as the passion for observing the miracle of migration.

The Detroit River Hawk Watch is famous for its Broad-winged Hawk numbers. There are few things that are as predictable as the annual September arrival of large numbers of these hawks, soaring and circling in what is known as kettles as they ride rising masses of air called thermals. Riding the air makes long-distance flights less demanding for the birds.



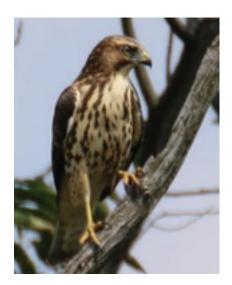
ACTIVITY 1 – CONNECT THE DOTS

What do you see when the dots are connected?



ACTIVITY 2 - WHICH OF THE FOLLOWING BIRDS ARE RAPTORS?

A raptor is a bird that uses its keen eyesight, powerful talons, and curved beak for hunting and feeding on small animals and other birds.



Broad-winged Hawk



Eastern Blue Bird



Tundra Swan

ACTIVITY 3 – INTERVIEW A HAWKWATCHER

Ask one of the hawkwatchers three questions that you are interested in knowing about hawkwatching. Space is provided below for writing the questions ahead of your visit as well as for the answers.

Question 1 Response 1 Question 2 Response 2
Question 2 Response 2
Response 2
Response 2
Response 2
Question 3
Response 3



ACTIVITY 4 - WORD SEARCH

EAGLE FALCON HAWKWATCHING

MERLIN OSPREY RAPTOR

SHARP-SHINNED RED-TAILED VULTURE

LIFT WING BUTEO

F Ζ Ζ R G В Τ Χ Ν Ε Н Χ D Τ W D Ζ Q Μ M Ζ C W Ν В Τ С D 0 Q Q G Ε J 0 K G R Ε S Ρ S Χ Α S I U Q G Q Κ L Ν Υ Ν C Ρ L R D Ε Ν Ν I Н S Ρ R Α Н S I В W R L L J C Ε U Ε S Ε P 1 Η K ٧ Υ Α S Q W Υ Ε L 1 G R Τ Τ J ٧ U Τ U R Ε S Χ Α Q L L 1 Ν Ν Ρ Υ Ε R S 0 G Α С D R G Ε 1 1 M K R M W Α Q Q Χ Μ L R Α Н W U Τ Ε R R 0 Υ Κ L Α G Т В G Ε Ρ S L Н I Α U Κ Χ R Α T Κ Q W Τ F R Q Q Ζ Μ G L 0 0 M Q W Н K W Α Τ Α В I 0 Μ Μ F Ε 0 M Ρ D Τ Α Ζ U 0 R 0 Н L В Υ Υ Υ C Τ F Κ M Ρ R D Н Χ L D Н F R F D ١ Ζ U ٧ J Α U Τ W Τ Α F Q W 0 L Α Ε ١ В Α S D ٧ Q Н Н Α Ε В Q W Н U R L L 0 С Α С Ε ٧ I В U R Ζ D Q Ε С D Ν Χ M S Ε C W Ζ U 0 Ι G 0 Ρ D 0 M D K L W Ν Ι F Χ В F S D W Q Т S C Α K Υ R Ν U Α В Ε W W I J ٧ S Τ D 0 Υ J Ζ L G Q W Χ P 0 J R Χ F Ζ J Ε Н Α Ρ W Κ J W K C ٧ D Υ 0 M Q F Ρ U Q С Ε Ζ S F R Κ Μ Υ Υ 0 Η В Υ Χ

ACTIVITY 5 – BROAD-WINGED HAWK

Below is a picture of a Broad-winged Hawk in flight. Answer the following descriptive questions.

What do you notice about the tail shape?
. Is there a large band in the tail?
. What color is the outline of the wing?
. What do you notice about the shape of the wing?
. Is the trailing edge of the wing curved or straight?



ACTIVITY 6 - MERLIN

Below is a picture of a Broad-winged Hawk in flight. Answer the following descriptive questions.		
1. What do you notice about the tail shape?		
2. Are the wings dark or light colored?		
3. Do the wings look triangular?		
4. Are the wings slim or fat?		
5. Is the bottom (trailing) edge of the wing curved or straight?		



ACTIVITY 7 - TAKING THE WEATHER

At the beginning of the hour, notice the environmental data using your senses. Circle your observations.

Wind Direction:

N NE E SE S SW W NW

Wind Speed:

None Slight Medium Fast Very Fast

Precipitation:

None Mist Rain Snow

Sunlight:

Hazy Overcast Partial Sun Full Sun

Temperature:

Very Cold Cold Comfortable Warm Hot

Visibility:

Can't See Across the River Can See Canada Clear

ACTIVITY 8 - COUNTING RAPTORS

Count the number of Raptors that migrate past the site.

1. How many birds total did you count during your stay?	
2. How many of the birds were raptors?	
3. What other birds did you count?	
4. What was your favorite bird of the day?	
5. Did you see an eagle?	
6. What is the easiest bird to identify?	



ACTIVITY 9 - BUTTERFLIES AND HUMMINGBIRDS

Hawkwatching is all about raptors and the migration. However, raptors are not the only creatures that migrate. The famous Monarch Butterfly also migrates, as do Blue Jays and Crows. Most hawkwatchers develop a deep appreciation for all migrating creatures.

Have you seen any butterflies today?	
2. Were they all headed in one direction?	
3. Was that direction in the same direction as the raptors?	
4. Do you think they were migrating?	
5. Did you see any Blue Jays today?	
6. Were they all headed in one direction?	
7. Was that direction in the same direction as the raptors?	
8. Do you think they were migrating?	

ACTIVITY 10 - CONNECT THE RAPTORS TO THE NAME

Draw a line from the raptor to their description. You may use any resources to help answer these questions.

Raptor	Description
Turkey Vulture	Has a big white head
Bald Eagle	Adults have red tails
Osprey	Large black raptor that rocks in the air
Sharp-shinned Hawk	Has a golden nape on back of head
Red-Tailed Hawk	Large black raptor with a short tail
Golden Eagle	Close to a large Sharp-shinned Hawk
Broad-winged Hawk	Fastest of all raptors
Cooper's Hawk	In flight, it looks like a giant M
Black Vulture	A small-headed, snappy raptor
Peregrine Falcon	Large black and white tail bands

ACTIVITY 11 - SECRET CODE NEWS!

Use the following key to decipher important migrating hawk facts. To keep others from spying on your work, it has been specially coded for you! To decode, simply shift back one letter in the alphabet for each letter. Example: "Tpnf" becomes "Some."

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Tpnf njhsbujoh sbqupst fbu jotfdut uibu bsf bmtp jnqpsubou, tvdi bt esbhpogmjft.

Ju jt jn qpsubou up lffq uif fowjsponfou ifbmuiz tp uibu njhsbujoh sbqupst ibw fdmfbo gppe boe xbufs up tvswjwf uifjskpvsofz.

VISIT YOUR LOCAL HAWKWATCH!

Detroit River Hawk Watch (DRHW) is part of the U.S. Fish and Wildlife Service at the Detroit River International Wildlife Refuge and its friends' group, the International Wildlife Refuge Alliance (IWRA), along with the Detroit River Hawk Watch Advisory Committee (DRHWAC).

Website:

www.drhawkwatch.com

Partners:

https://www.fws.gov/refuge/detroit_river/ http://www.iwralliance.org/ https://www.gssem.org

Facebook:

https://www.facebook.com/groups/143903318970434/

Latest Count Data: www.hawkcount.org

Twitter:

@DRHawkWatch

THE HAWK MIGRATION ASSOCIATION OF NORTH AMERICA (HMANA)

HMANA is a nonprofit organization that promotes hawkwatching and provides resources for the hawkwatching community. This includes raptor identification materials, the free HawkCount.org website, and Hawk Migration Studies (the official journal of HMANA). For more information and resources, visit http://www.hmana.org/

This booklet was originally created by Brian M. Wargo for the Allegheny Front Hawkwatch in Pennsylvania (http://www.alleghenyplateauaudubon. org/hawk-watch.php). Photos, diagrams, and other inscriptions were created by Brian M. Wargo and Jerry Jourdan, for the DRHW. No copyright laws have been violated. Permission is granted by the author for customization.