The Allegheny Front Hawk Lookout

# Your Questions Answered

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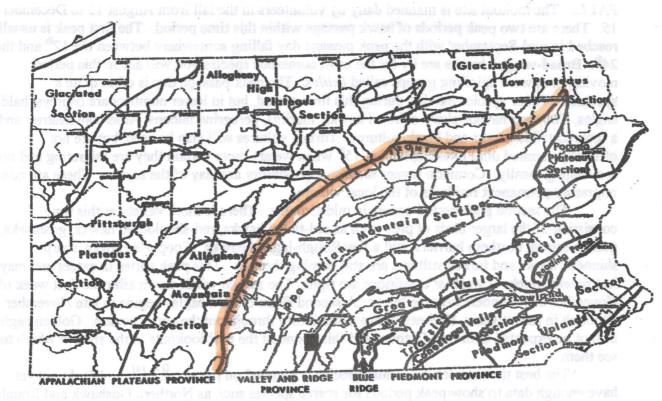
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Your, Questions Answered

## What is the Allegheny Front?

Beginning in the late Paleozoic, tremendous forces were at work reshaping the surface of the planet. A huge super continent, termed Pangaea by modern geologists, was beginning to break up. In the millenniums that followed, Africa separated from South America and collided with North America. This geological event produced the new Appalachians and the long escarpment through Pennsylvania known as the Allegheny Front. In layman's terms, it is a tilt block mountain probably formed by thrust faulting of rock strata beneath what today is the Allegheny Plateau. Imagine a huge block of the Pennsylvania landscape being forced upward on its eastern side. The result will be a steep, almost sheer ridge on the eastern edge with a long gradual slope on the western side extending clear to Pittsburgh. This, of course, is an over-simplification of a long complex geologic history that is still not fully understood, but for our purposes it offers some explanation for the long steep ridge that runs through Pennsylvania from West Virginia almost to New York. See the accompanying map below.

Approaching the Allegheny Front from the east, you can easily note the sharp and sudden cliff like ridge rising abruptly in front of you. This long escarpment marks the separation of the Ridge and Valley Province of the Appalachian Mountains from the Allegheny Plateau Province. In other words, this ridge you are standing upon is where the Alleghanian orogeny stopped! To the east the rocks are severely folded and deformed. To the west, most of the rocks, at least at the surface, are flat with minor undulations. You do not see the deep slanting rock strata in road cuts that you see in the Ridge & Valley Province.



used Hawk, but they have a definite flight period in the four month

#### **Features of the Lookout Site Location**

The Allegheny Front Hawk Lookout sits on the top edge of the Front's eastern slope along the boundary of Somerset and Bedford County. In fact, the boundary between these two counties probably passes through the parking lot. The viewing area itself is on the extreme western edge of Bedford County. The property is approximately six acres in size and is managed by the Allegheny Plateau Audubon Society headquartered in Johnstown. Looking eastward you can see Shawnee State Park, the towers atop Evitts Mountain and the former hawk lookout on Tussey Mountain above Everett nearly 20 miles away. To the northeast you can easily see the town of New Paris and the Dunnings Creek Wetlands, another property managed by the Allegheny Plateau Audubon Society. Twelve miles to the north is Blue Knob State Park and Blue Knob, the second highest peak in Pennsylvania. To the south and southeast you can see Route 30, a buffalo farm and the Pennsylvania Turnpike. The lookout site commands one of the finest scenic views in the Commonwealth.

This lookout has been manned daily since 1997. The adjoining property also served as a hawkwatch for five years from 1989 through 1993. (See the section on site history).

The Audubon Society began renting a portajohn for your comfort in 1999. This facility costs \$85 a month and donations are accepted to defray the costs in the collection jug inside the structure. There is also a picnic table, covered fire ring and bulletin board. Please read our bulletin board on the proper ethics of hawk observation. Parking in the viewing area is only permitted for handicapped persons.

#### When to Visit the Lookout Site

FALL. The lookout site is manned daily by volunteers in the fall from August 15 to December 15. There are two peak periods of hawk passage within this time period. The first peak is usually reached in mid-September with the peak passage day falling somewhere between the 12<sup>th</sup> and the 24<sup>th</sup>. Broad-winged hawks are by far the most numerous species you will see in this period moving in upward spiraling groups called *kettles*. The peak passage day is often quite a spectacle. Other species moving during this time period, but in lesser numbers are ospreys, bald eagles, Cooper's hawks, sharp-shinned hawks, merlins, peregrine falcons, American kestrels and a few red-tailed hawks and black vultures. Turkey vultures will also be seen, but are not officially counted until after September 15<sup>th</sup> when we are more certain they are migrating and not scavenging locally. Common ravens are also a possibility any day of the season. These are non-migratory permanent residents of the local vicinity.

The second peak period occurs in mid-October. There is more variety at this time consisting of the larger birds of prey such as red-tailed hawks, red-shouldered hawks, goshawks, golden eagles, northern harriers, and a few Rough-legged hawks. Cooper's Hawks, sharpshinned Hawks and turkey vultures are still coming through. This peak varies in extent and may last several weeks if weather conditions are right. The season winds down after the first week of November and numbers become fewer. A second flight of bald eagles begins in late November, although in recent years, bald eagles are a possibility throughout the entire season. Golden eagles cannot be expected until mid-October and this is one of the best lookouts in the state in which to see them.

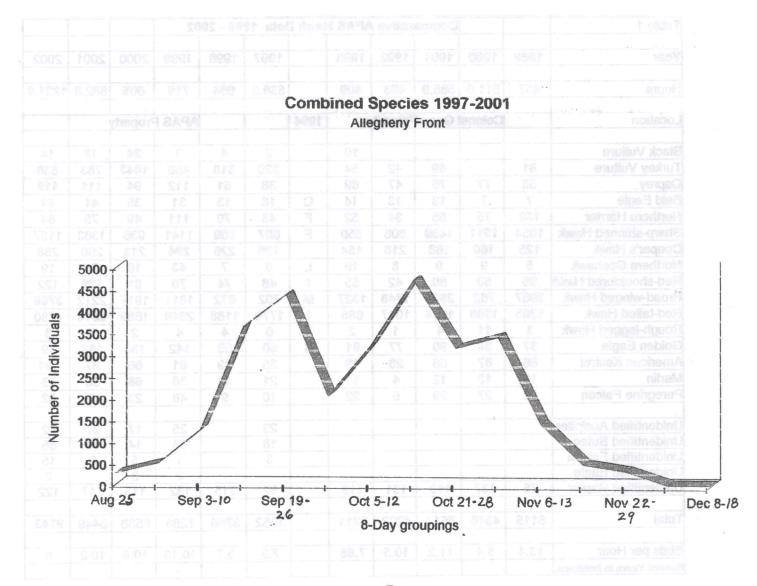
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**SPRING.** The lookout is manned daily beginning in mid-February until early May. At this time we have had daily coverage for only three years and do not have sufficient data for meaningful graphs for each species. This is a fair lookout for observing the spring migration. Nearly 2000 birds passed in the spring of 2002, but this wanes in comparison to the fall numbers. See the tables on page. 8. Spring hawkwatches are normally not as productive as those in the fall. However, if the winds and weather are right, significant flights have been seen during the spring. The golden eagles tend to come through early, usually around the second week of March. The broad-winged hawks pass through in mid-April. Ospreys have made some impressive showings. In fact, our best osprey season was the spring of 2000 when 165 were counted. The fall osprey record at the time of this writing is only 119. The highest single day record for osprey was also counted in the spring. Fifty-one ospreys passed the lookout on April 27, 2000.

As we get more data in the years to come, we will have a better idea of what to expect on the spring passage.

The graph below shows the overall picture of the fall migration for all species. You can see there is a peak in mid to late September and another in mid to late October. If you have only a few weekends to visit, let this graph be your guide to choose the most likely time to see the most hawks. It's always a hit or miss risk, but remember, east winds after the passage of a front is almost a sure bet to see a major movement.



## Brief History of the Allegheny Front Lookout Including the Site Flight Records

The annual records of this particular site go back to 1989 when the adjoining property, now owned by APAS member Mary Jane Seipler, was under the private ownership of George Gage, known to hawkwatchers as Colonel Gage. The Colonel built a vacation home on the edge of the cliff, was birdwatcher friendly and welcomed hawkwatchers onto his property to count the raptors. He even allowed them the privilege of using the bathroom facilities. This friendly relationship continued until the Colonel died in 1993. His son, George Gage II, who lived in New Jersey, had insurance fears for the place and asked us to discontinue our hawk watching activities on his property in 1994. We obliged and for three years we were without a decent watch site along the front until Tom and Sally Dick bought the six-acre property on which you are now standing in 1997 and conveyed it to APAS. Therefore, the annual records that follow in table 1 combine the previous five years of record keeping from Colonel Gage's property (1989 thru 1993) and the current lookout site where record keeping began in 1997.

Table 1			Compa	arative	APAS I	lawk [	Data 19	989 - 20	02			
	1000					<u> </u>						
Year	1989	1990	1991	1992	1993		1997	1998	1999	2000	2001	2002
Hours	457	511.6	585.9	403	409	100000	538.5	664	719	605	882.8	1221.8
Location		Colone	Gage	Propert	y	1994			APAS	l Propert	y	
Black Vulture					10		2	4	3	24	18	14
Turkey Vulture	81		49	42	54		320	318	488	1043	783	836
Osprey	53	77	76	47	69		38	61	112	94	111	119
Bald Eagle	7	7	13	13	14	0	18	13	31	35	41	64
Northern Harrier	132	75	55	34	52	F	43	70	111	49	75	64
Sharp-shinned Hawk	1054	1511	1439	808	550	F	607	809	1141	936	1363	1157
Cooper's Hawk	125	160	168	218	154		136	226	294	213	260	288
Northern Goshawk	5	9	9	8	10	L	8	7	43	16	24	19
Red-shouldered Hawk	95	59	60	42	55	1	48	74	70	81	129	122
Broad-winged Hawk	2967	762	2823	1748	1327	M	702	632	1811	1917	2212	3766
Red-tailed Hawk	1385	1306	1614	1017	685	1	1779	1188	2649	1689	2814	2780
Rough-legged Hawk	3	11	4	1	2	T	0	4	4	2	7	3
Golden Eagle	37	34	90	77	61	S	60	59	142	130	163	89
American Kestrel	66	87	66	26	16	13	36	39	81	66	87	101
Merlin	18	13	12	4	11	1	21	40	38	68	50	33
Peregrine Falcon	12	27	29	6	22		10	9	48	23	31	52
Unidentified Accipiter	<u></u>						23	1	25	17	37	42
Unidentified Buteo							16	1	53	14	89	55
Unidentified Falcon							3		1	5	8	15
Unidentified Eagle									2	3		2
Unidentified Raptor	75	137	110	131	119		82	215	132	113	147	122
Total	6115	4346	6617	4222	3211		3952	3768	7286	6538	8449	9743
								0.00	1200	0000	0113	0140
Birds per Hour	13.4	8.4	11.2	10.5	7.85		7.3	5.7	10.13	10.8	10.2	8
Record Years in boldface.										1		

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## **Favorable Weather Conditions for this Site**

Hawks move after the passage of frontal systems by riding on thermals and updrafts. **Updrafts** at this site are created by EAST WINDS. Since the Allegheny Front runs slightly northeastward, any wind coming from the east will strike that wall and be forced upward. Chances for a good passage day are usually best right before or after a frontal system in New England with east winds. Winds coming from the west do not create updrafts because of the mountain's gradually sloping character on the west side. Hawks will still be seen, but usually not in high numbers.

**Determining the wind direction:** The weathervane arrow on the site points into the wind and tells you the direction from which the wind is blowing If it points towards the parking lot, the wind is coming from the west. If it points out over the valley you are experiencing an east wind.

Thermals (columns of warm rising air) on sunny days also offer hawks updrafts. These tend to come earlier in the season and may spread the birds out a little. Broadwinged Hawks are riding thermals when they appear in the kettles described above. They will passively allow the updraft to carry them in a spiraling circle to the top of the thermal where they will peel off and dive to the bottom of the next thermal. With this method they can migrate effortlessly for miles without batting a wing.

#### Weather Peculiarities of the Hawkwatch Site

Fog and low hanging clouds love to hug this mountain. When the sun is shining brightly in Central City just a couple of miles away, the lookout could be completely socked in – and it will stay that way for hours. The valley could be in sunlight as well, while a long cloud clings to the ridge. Counters have sometimes left the lookout and moved to a location in the field below to count the hawks passing over the cloud on the mountain.

The wind can be very strong and the temperature is nearly always 10 degrees lower than the valley below. Your visit here can be ruined if you are not properly dressed. At lower temperatures and a high wind chill factor the lookout can be significantly different in comfort levels than the surrounding terrain. Come prepared with a windbreaker and an extra sweater or jacket.

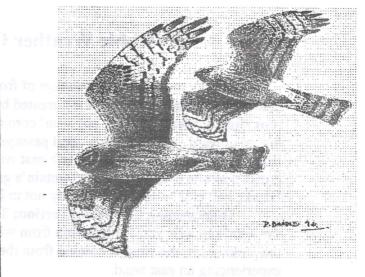
Also, the road to the lookout is not plowed in winter. Early fall snow storms may require a 4-wheel drive to get in.

#### **Other Activities**

The Northern Saw-whet Owl migrates along this ridge. The site Has been used in the past as a saw-whet owl banding station. Dave Darney caught and banded 18 saw-whet owls in a week in the fall of 2001.



1989-2002	<u>anis 2010</u>	w the
- od bria linov radi od	High Count	Year
Black Vulture	24	2000
Turkey Vulture	1043	2000
Osprey	119	2002
Bald Eagle	64	2002
Northern Harrier	132	1989
Sharp-shinned Hawk	1511	1990
Cooper's Hawk	294	1999
Northern Goshawk	43	1999
Red-shouldered Hawk	129	2001
Broad-winged Hawk	3766	2002
Red-tailed Hawk	2814	2001
Rough-legged Hawk	11	1990
Golden Eagle	163	2001
American Kestrel	101	2002
Merlin	68	2000
Peregrine Falcon	52	2002
Combined species	9743	2002
Hours Observation	1221.75	2002

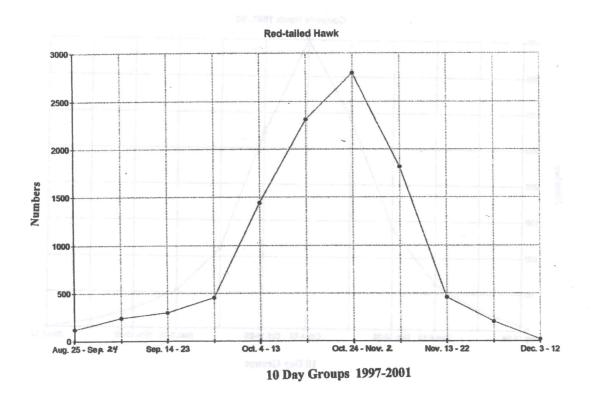


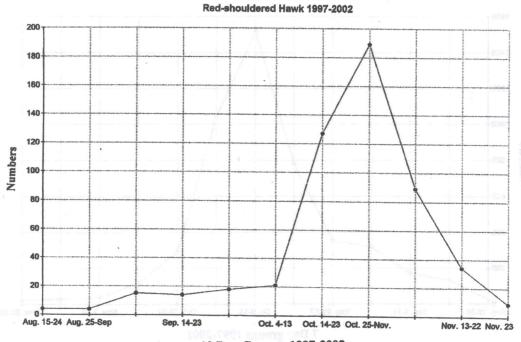
Annual Fall Records - Allegheny Front							
Year	Total	Hours	Birds/Hr.				
1989	6115	457	13.4				
1990	4346	517	8.4				
1991	6617	590.8	11.2				
1992	4222	403	10.5				
1993	3211	409	7.85				
1997	3952	541	7.3				
1998	3768	661	5.7				
1999	7286	719.2	10.13				
2000	6538	605.3	10.8				
2001	8449	832.75	10.2				
2002	9743	1221.75	8				

Ann	ual Sp	ring Records	- Allegheny	Front
vol 1	Year	Number	Hours	Birds/Hr.
1	999	759	215.5	3.5
1	2000	1878	238.5	7.9
	2001	1187	336	3.5
1	2002	1987	445.25	4.5

	aily Counts				
fIndividu	uais 1989-2002		Annual Sp	ring Records	- Alle
High Count	Date	a biger wind ch us odt nadt als	Vece	Number	H
8	9/13/2000		Year	Number	-
106	10/14/2002	.16 Korst 10 19 18	1000	750	-
18	9/19/1999	is not plowed	1999	759	2
6	9/6/00 & 8/25/01		2000	1878	2
9	10/31/1999	а.	2001	1187	
330	10/13/2001		2002	1987	4
65	10/6/2002				
6	10/8/1999	č			
27	10/30/2001				
1222	9/20/2002	origrates alon			
347	11/6/1997	ibase luro tom			10
3	11/18/2001	is ni alwo tech			
33	3/22/2000	n ja ma natio V Adala			
47	10/6/2002				
21	10/11/2000				
15	10/2/1999			and the second	
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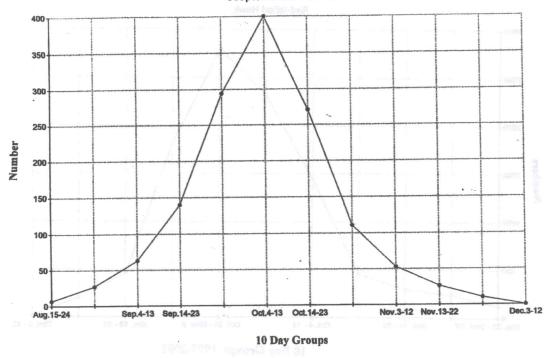
		1
Hal	9/19/1999	b
	9/6/00 & 8/25/01	
	10/31/1999	2
)	10/13/2001	
	10/6/2002	
	10/8/1999	
	10/30/2001	
2	9/20/2002	TEC.
7	11/6/1997	
003	11/18/2001	
	3/22/2000	
	10/6/2002	
	10/11/2000	
	10/2/1999	
for the second se		

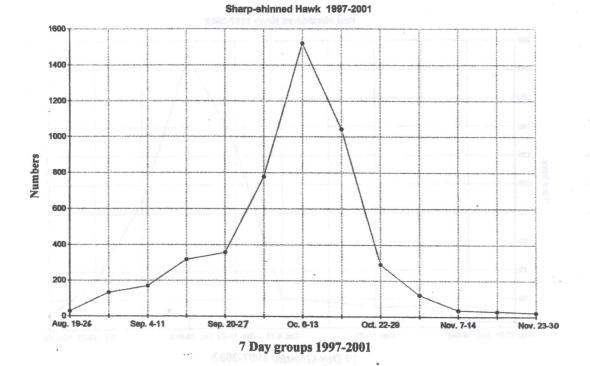


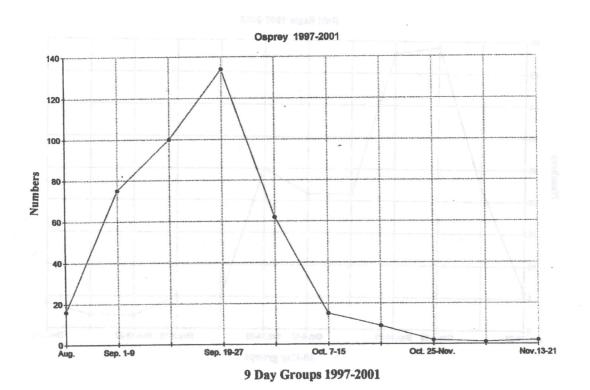


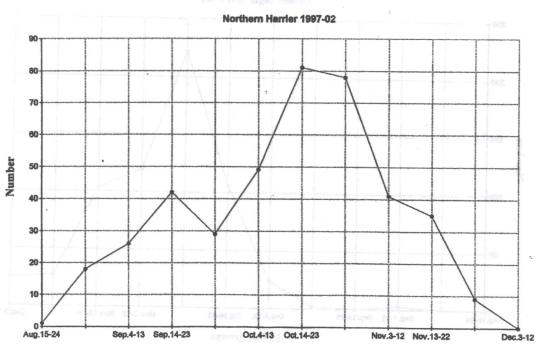
10 Day Groups 1997-2002

Cooper's Hawk 1997- 02







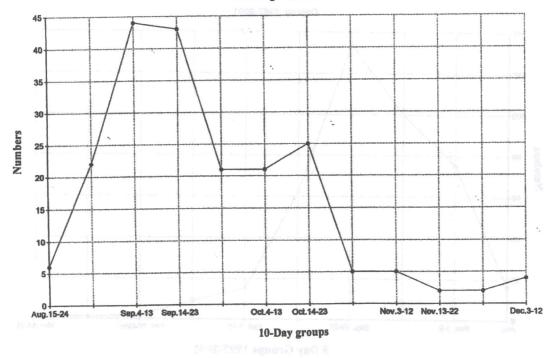


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**10 Day Groups** 

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#### Baid Eagle 1997-2002

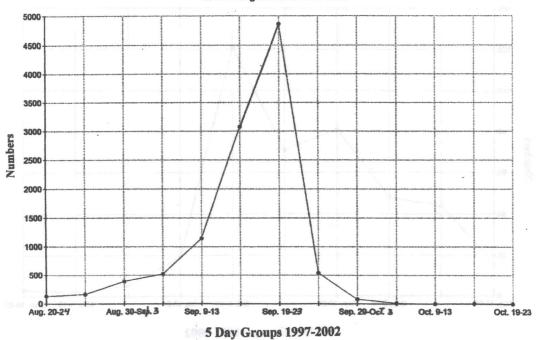


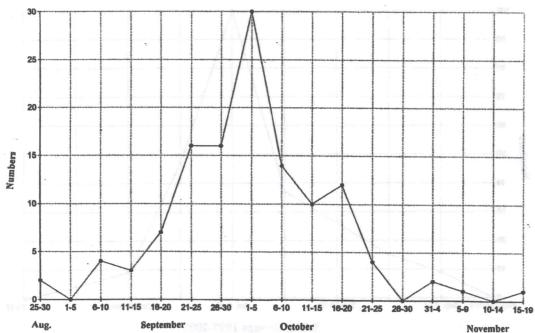
Aug.15-24 Sep.4-13 Sep.14-23 Oct.4-13 Oct.14-23 Nov.3-12 Nov.13-22 Dec.3-12

Golden Eagle 1997-2002

10-Day groups

Broad-winged Hawk 1997-2002



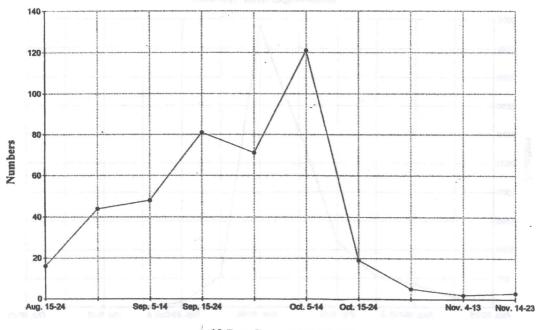


Peregrine Falcon 1997-2001

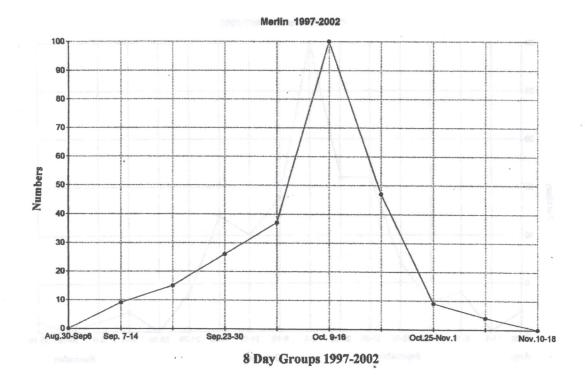
Best Times to See Peregrine Falcon

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American Kestrel 1997-2002



10 Day Groups 1997-2002



test Three in Sea Perception Fails

### Other Bird Species Seen at the Allegheny Front Lookout

Common Loon **Double-crested Cormorant** Great Blue Heron **Tundra Swan** Snow Geese Mallard **Black Duck Red-breasted Merganser Ruffed Grouse** Wild Turkey American Coot Killdeer Yellowleg sp. **Ring-billed Gull Caspian** Tern **Rock Dove** Mourning Dove Yellow-billed Cuckoo Black-billed Cuckoo Great Horned Owl Saw-whet Owl (banding project) Whip-poor-will Ruby-throated Hummingbird **Belted Kingfisher Common Flicker Re-bellied Woodpecker** Red-headed Woodpecker Lewis' Woodpecker (10/20/02)Yellow-bellied Sapsucker Hairy Woodpecker Downy Woodpecker Great Crested Flycatcher **Eastern Phoebe** Acadian Flycatcher Least Flycatcher **Eastern Peewee Barn Swallow** Blue Jay **Common Raven** 

American Crow **Tree Swallow Tufted Titmouse Black-capped Chickadee Red-breasted Nuthatch** White-breasted Nuthatch **Brown Creeper** Carolina Wren House Wren Golden-crowned Kinglet **Ruby-crowned Kinglet Blue-gray Gnatcatcher** Eastern Bluebird American Robin Wood Thrush Veerv Hermit Thrush Gray Catbird Northern Mockingbin **Brown Thrasher European Starling** Cedar Waxwing **Blue-headed Vireo** Philadelphia Vireo **Red-eyed Vireo** Black & White Warble Nashville Warbler Parula Warbler Cape May Warbler Black-throated Blue Warbler Yellow-rumped Warbler Chestnut-sided Warbler **Bay-breasted Warbler Blackpoll Warbler Pine Warbler** Palm Warbler Ovenbird Kentucky Warbler Common yellowthroat Hooded Warbler **Canada Warbler** American Redstart Northern Oriole Scarlet Tanager Northern Cardinal

Indigo Bunting Eastern Towhee Vesper Sparrow Dark-eyed Junco **Snow Bunting** American Tree Sparrow **Chipping Sparrow Field Sparrow** White-crowned Sparrow White-throated Sparrow Fox Sparrow Lincoln's Sparrow Song Sparrow **Rusty Blackbird Common Grackle** Brown-headed Cowbird Eastern Meadowlark **Red-winged Blackbird Evening Grosbeak Purple Finch** House Finch Pine Siskin American Goldfinch House Sparrow

This is a list of 111 species recorded on the backs of the tally sheets by some, but not all of the counters. Adding the 15 species of raptors, there have been 126 species of birds sighted at this location. This list will require updating. Dates and significant numbers would also make it more interesting. Visitors remember seeing a flock of over 100 common loons, but the date and number were never recorded. Numerous Vformations of snow geese, Canada geese, tundra swans, double-crested cormorants and ring-billed gulls have also been noted.

If anyone counts the birds in these groups, please ask the official counter to note it on the back of the tally sheet.

## Other Animals Seen at the Allegheny Front

A pair of gray foxes had a den right over the side of the hill in 2000 and were frequently seen staring at us or passing through. They were always curious, but never seemed very alarmed by our presence.

Black bears are occasionally seen and can become troublesome. One in 2001 destroyed the bird feeder during the night and another in 2002 paraded in several times during the day with people present and seemed unafraid. He was lured by food on the picnic table. If a bear appears during your visit, shout, and make loud noises anyway you can. If this does not scare Sir Bruin away, get in your cars until he leaves. DO NOT, under any circumstance, offer him food or leave food behind for him to find later. That is incentive for him to return, and while we have nothing against bears. we do not want them interrupting our counts.

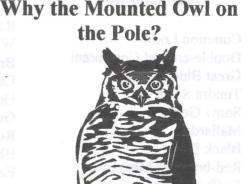
Chipmunks, gray squirrels, shorttailed shrews, deermice and a few red squirrels are also common residents. Whitetail deer are numerous, but because of the nearly constant presence of people, are rarely seen in the viewing area. They are, however, seen feeding in the fields below, often in sizable numbers in the spring.

Garter and black snakes are present. No poisonous snakes have yet been found.

Some counters also count the migrating monarch butterflies, particularly if they are having a bad hawk day. Giant fritillaries, red-spotted purples and Painted Lady's have been seen at the Front. Several cocoons of a polyphemus moth were found in the

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viewing area in the spring of 2001, but no one ever saw an adult emerge.



Great horned owls raid hawk nests at night and remove young birds, consequently, hawks see them as their enemy. Even immature red-tailed hawks seem to instinctively recognize the silhouette of a great horned owl as an enemy. The mounted owl decoy has lured many a hawk into closer viewing. We have watched high flying hawks dive on it and several have struck the plastic owl.

In the fall of 2002 Che Mincone and Gene Flament glued some ringneck pheasant feathers on the owl giving him a rather shabby looking appearance. To our surprise it was an improvement. The pheasant owl drew in more circling raptors than ever before. Once four individual immature red-tailed hawks circled the owl just about a minute apart.

Most hawk lookouts incorporate an owl decoy. It is just another measure to give visitors a good experience and a closer look at these beautiful migrating raptors.