

Rockfish Gap Hawk Watch – Fall 2004 (corrected) **Report by Brenda Tekin, Co-coordinator**

By the end of August we had tallied a little over 200 migrating raptors, including a record-setting 157 Broad-wing. With such an impressive early start, we were optimistic for a banner season.

On August 25 I reported the following to BirdHawk and VA-Bird listserves:

We are seeing what we perceive to be early movement of Broad-wing and Red-tail. We are already over 50 BW for the month of August that may set the monthly record. Red-tails have been observed in small groups (4-5) with usually one taking off heading south.

Unfortunately, Mother Nature dealt several bad hands in the way of persistent fog, torrential rains and high winds from remnants of several tropical depressions and hurricanes that worked their way northward along the Blue Ridge. And when skies were clear, there were many days when observers had the difficult challenge of locating high sailing raptors in the brutally, bright cloudless blue skies.

At the height of Broadwing migration the remnants of Hurricane Ivan reached the Blue Ridge immediately followed by a strong cold front out of the NW that blasted unseasonably cold temperatures through the region. The birds were already in the pipeline and they were on the move. On September 18, with strong NW winds, the birds were clearly wind-driven, going with the flow you might say. Sites to out east cashed in with impressive BW counts.

Late in the season, unseasonably warm, tropic air settled over the region. On November 7 I reported: *“What a pleasant warm, lazy summer day with light southerly breezes. This couldn't be November! Temp: 25c (high) Humidity: 32%.. Brutal bright blue with haze and heat shimmer early in the day.”*

SPECIES ACCOUNTS **(Total count for year/15-year median)**

Osprey (104/131) – a significant drop from last year, it was one of the lowest on record.

Mississippi Kite – no sightings

Bald Eagle (27/20)– After last year's rebound following significant decrease in numbers the previous two years, this year was disappointing with 14 fewer than last year.

Northern Harrier (28/52) – An early showing on two separate dates, we were hopeful of a turnaround to the continual decline since 1992. The season's disappointing total set a new record low for this species.

Sharp-shinned Hawk (975/786) - A surprising increase from last year, this was the highest count dating back to 1995, putting us well above the 15-year median. There was

only one triple-count day and in reviewing the daily counts, the migration went through the end of October.

Cooper's Hawk (145/154) – Still above the 15-year median, season ended with 14 fewer than last year. The earliest record was set on August 15. On a gray, overcast morning in October, with threat of rain, an adult flew in and perched atop a utility pole a short distance from the observers and remained for a few minutes before flying toward the interstate where it stirred up roosting pigeons underneath the overpass.

Northern Goshawk (2/5) – With only two for the season, this put us below the 15-year median for the first time since 1998. On October 31 an immature flew low over the NE corner of the hotel providing wonderful close-up views.

Red-shouldered Hawk (16/35) – Not only well below the 15-year median, it was the lowest count on record dating back to 1985.

On September 18, with approach of strong cold front on heels of Ivan, several observers witnessed an interesting site.

A single Red-shouldered Hawk came overhead sailing "BACKWARDS". It never flapped as it sailed across the interstate and passed not too high overhead. I don't recall ever seeing a bird flying such a long distance backwards on the wind without flapping the first time.

Broad-winged Hawk (4,572/6,502) - The first official migrant of the season was a BW at 9:25 a.m. on August 15 and although not an early showing, the total of 41 BW that day was certainly one for the records.

The first triple-digit day for Broadwing was September 11.

A single **dark-phased** Broadwing on September 11 at 10:33 a.m. EST observed at eye level. Initially thought it to be a crow but realized as it came up along east side of ridge very short distance from observation deck that it was a BW, a stunning bird!

Below are excerpts posted to BirdHawk and VA-Bird listserves to show how the Broad-winged migration played out at Rockfish Gap and neighboring sites.

Candler Mountain (CM) – southeast edge of Lynchburg, VA, 45 miles SSE of Rockfish Gap and 32 miles east of Harvey's Knob

Harvey's Knob (HK) south of Rockfish Gap along the Blue Ridge

Snicker's Gap (SG) to the north along Blue Ridge approximately 25 miles west of Leesburg, VA;

As stated at beginning of this report, the remnants of Hurricane Ivan arrived in our area just at the peak of BW migration immediately followed by a strong cold front out of the NW that in all likelihood pushed the majority of the birds eastward into the piedmont.

By September 15 reports from the northern sites indicated the birds were on the move. The outer bands of Ivan arrived by September 17, producing heavy rains and

high winds. The remaining rain bands were pushed out by the arrival of a very strong cold front the following day.

September 18 (Total BW: 917) [HK - 874; SG - 755]

Birds flying today were clearly wind-driven with majority coming through sideways.

*Hold onto your hats, your chairs, and everything else. Tropical Depression Ivan barreled through the region yesterday producing heavy rains, high winds, and strong thunderstorms that produced several tornadoes. Strong winds out of NW prevailed throughout today. On a trip up to the mountain this morning low clouds rolling over with threat of rain. Winds were barreling out of the NW rocking vehicles on the interstate. We returned to the mountain by 1:30 p.m. EST with last band of heavy clouds from Ivan being pushed out over Shenandoah Valley and over gap into the Piedmont by the approaching cold front. Patches of blue sky and sunshine increased throughout the afternoon. Winds were barreling out of the NW, pretty much steady between 50-61 km/h and stronger gusts that would blow the chairs around. (Whole trees in motion and resistance felt walking against the wind.) By 4 p.m. EST winds were diminishing somewhat to 30-40 km/h! Temp: 19 c dropping to 17.5c (definite chill in the air!) Humidity: holding steady at 50% Bar Pressure: 1009 increasing to 1010 Visibility: Crystal clear west over in valley and east into Piedmont. (NO fog or haze) Cloud Cover: from overcast (100% cloud cover) to mostly clear for a beautiful sunset!
Hourly count for BW: 1-2 (EST)42; 2-3:54; 3-4:89;4-5:285; 5-6:447
Many were observed dropping down into the trees by 6 p.m. EST and we're expecting an impressive liftoff tomorrow morning.*

September 19 (Total BW: 1068) [CM - 335; HK - 1285; SG - 357]

What a difference compared to yesterday's MACH 5 wind speed. However, it would have been nice to have had a few clouds. For that matter, even a contrail or two would have been nice! Morning greeted us with bright crystal clear skies, with no fog or haze that remained throughout the day... Cloud Cover: zilch Not even a contrail! Nothing but bright blue sky more like an early October day!

*Another banner day. After yesterday's late afternoon flight, we figured there would be a good morning start so four us arrived by 6:30 a.m. EST. First bird, a SS, came up at 6:37 a.m.. We had a decent morning then things really slowed down for several hours. Last two hours BW were pretty much non-stop. We FINALLY had several impressive kettles late in the day between 4:30- 5:15 EST! We had BW all over the sky!!!
BW hourly flight as follows (EST):
6:30-7am:7; 7-8am:22; 8-9am:191; 9-10am:98; 10-11am:36; 11-12noon:57; 12-1pm:4; 1-2pm:17; 2-3pm:8; 3-4pm:21;4-5pm:169; 5-5:45pm:438*

Harvey's Knob to our south also had good flights with a few more BW. Snicker's Gap, however, had a disappointing day.

Rich Rieger from Snicker's Gap summed it up,

A great day to do almost anything, except hawk watch". With the cloudless, electric-blue sky and the warmth of the full sun merging gently with the cool breeze, anyone in their right mind would've felt blessed with this early autumn day. Say no more... There was one unsubstantiated (and highly suspect) report of a cloud in the 3rd hour of observation, eyewitnesses have been detained for questioning.

September 20 (Total BW: 1014) [CM - 4,417; SG – 146]

Nothing but bright blue sky for duration of a long afternoon. Birds were difficult at best to locate and only when they were almost overhead. Most of the Broad-wing were located high up in bright blue almost on top of us. Several large kettles before streaming across the sky. With diminishing winds we noted streaming birds far out to the east over Rockfish Valley and one large kettle. We figured most of the BW were tracking further to our east or lost in bright blue sky overhead.

Snicker's Gap continued to be plagued with bright blue skies as noted in their post:

No clouds at all for the first and last two hours, and a whopping one-percent cover for the remainder of the day (and we're being generous here).

September 21 (Total BW: 315) [CM -182; SG – 11]

Report from Gene Sattler at Candler's Mountain:

Guardedly optimistic regarding the remainder of the month. Reports to the north indicate that this huge high pressure cell has been producing consistent NW winds there that have been pushing the birds towards the coast, which brings bigger flights to the piedmont. Our flight Monday seemed to reflect this, and today was hopefully a short lull. There are enough sizable numbers of Broadwings being reported in New England yet to suggest that we could have the possibility of appreciable numbers here for the next week or so. We not uncommonly have our higher numbers towards the end of September compared to the ridge lookouts.

September 22 (Total BW: 39) [CM – 359; SG – 12]

Stationary high pressure system producing bright blue skies and no wind to speak of as the day wore on... Crystal clear blue, no fog or haze; there was not even a whisper of a cloud before 1 p.m. EST. Thin wisps of cirrus clouds began to creep in by mid-afternoon on the less than 1 km/h wind speed. By then the wind had changed to southerly flow. Things came to an almost screeching halt. There were almost as many Sharp-shinned as Broad-wing! No eagles or osprey...

Although no clouds against bright blue sky, reports are what few birds came through were relatively low throughout the morning.

“Clouds are overrated anyways.” – Snicker’s Gap

September 23 (Total BW: 58) [CM – 40; SG – 41]

Another bright blue sky day with NO clouds. Rockfish raptorians were able to get a few more than yesterday but not by much. Airplanes well over 100 outnumbered raptors. We need an aircraft identification chart. Aircraft: well over 100 - Thank you contrails!

September 24 (Total BW: 84) [SG – 25]

Light cirrus clouds and lots of contrails wisping across the sky but birds were too few and far between. An unexpected surprise for the five observers late afternoon at approximately 4:50 EST when a wave of 64 BW passed low overhead following ridge southward.

September 25 (Total BW: 466) [CM – 720; SG – 170]

Early morning most of the thin layer of clouds created by numerous contrails that provided great backdrop. A great day with just enough wind and clouds to keep birds relatively low throughout the day. Most easily seen without binoculars once we saw them overhead.

From Candler’s Mountain:

Several members of the Lynchburg Bird Club defied a bleak prognosis for the day’s flight by enjoying a couple of hours of decent hawk-watching in the morning. Largest groups of BW were 240 at 2:20 & 120 at 4:00 EDT. Birds early on were relatively close to the ridge and offered nice looks, but in the afternoon it was business as usual, spotting the birds by scanning, as the ridge is not tall enough (1336 feet) to draw the birds under most conditions.

Swainson’s Hawk – No sightings since 1994.

Red-tailed Hawk (982/582) – Not only did we see a substantial increase from last year, this was a record-setting season well above the 15-year median. The second highest single-day count of 542 was set on October 31. The early date record was set with three on August 15.

A dark-morphed was observed on August 20 at 10:25 am. Observed this bird through scope and about the only thing "light" on this bird were the "silvery-like" fingers in wings like that of Turkey Vulture.

The following is report of the record-setting count on October 31:

Happy to report no tricks but a day full of treats!

At the close of the count I kept adding up the numbers and recounting, trying to digest the magnitude of today’s events. If not for record-setting Red-tailed Hawk, today was more like the typical first of October with 8 species. For the second day in a row, it was non-stop birds throughout the day with no mid-day lull. This was certainly one for the record books with Red-tails shattering the 2nd highest

single day record with a very impressive 542! Red-tails were everywhere, most in small groups and several impressive kettles more likened to migrating Broad-winged. For those us there today, it was one continuous, spectacular flight! By 4:10 things were slowing down but quite a few birds were observed flying in and staying north of the gap, settling down into the trees. Oh, if only I could be there tomorrow for the liftoff.

Rough-legged Hawk (0/0) – no records since 2001

Golden Eagle: (2/5) Below the 15-year median, the unseasonably warm temperatures late in the season might explain the significant drop from last year.

Report from early in the season on September 19:

At 4:26 p.m. EST a 2nd adult BE (3rd BE for day) came in together with adult Golden and Osprey. Several observers were looking at the adult BE while others were describing an adult Golden. Several were thinking the others needed to go back to basic training camp! It was not until after the adult Golden Eagle flew over the roof of the Inn that everything discovered the second eagle, the adult Bald, was a short distance behind and lower than the Golden!

American Kestrel (64/94) – Counts for all three falcon species dropped significantly from last year and could quite possibly be the result of the unfavorable weather conditions during September that included strong winds that in all probability pushed the birds eastward. A very disappointing season with a dramatic drop from the previous year and the lowest count dating back to 1993.

Merlin (13/12) - Just one above the 15-year median, season ended with 10 less than last year. On August 20, a female glided across in front of observers almost eye level, so close that we could easily see details without binoculars.

Peregrine Falcon (11/17) - Another substantial drop from last year putting us below the 15-year median.

Bird Species – few highlights

Great Blue Heron, Double-crested Cormorant,

Chimney Swift – Thousands moving non-stop heading NW over Waynesboro during early evening hours of 8/30

Common Nighthawk – 37 on August 31; On the evening of August 30 Rick Myers spotted a group of 62 over the valley that few south over the gap followed by a cloud of swirling CONI totaling 46 a few minutes later spotted by Jim Fitzgerald, Total that night was 148. Peak flight was on Sept. 1 with over 250. Hats off to Robert Plank who spotted a swirling mass over Waynesboro at 6:23 EST that clearly surpassed 200 CONI. Last report of a single bird on 9/24.

Scarlet Tanager – two separate reports of adult males flying over

Red-eyed Vireo, Blue-headed Vireo – one serenading observers on 8/22

Gray Catbird, Brown Thrasher, Killdeer

Rusty Blackbird – several small flocks reported

Pigeon – A first, a group of four presumed to be homing, heading west high up following the interstate.

Ruby-throated Hummingbird – not counted on a regular basis this season, a total of 41 reported including several that stopped long enough to take a few sips from the feeder we placed near the patio.

Red-headed Woodpecker – impressive new single day record of 26 on 9/19

Other Life Forms

Butterfly species included **Cabbage White, Spicebush, Eastern Tiger Swallowtail, Clouded Sulphur, Silver-spotted Skipper, Red-spotted Purple**. The very low count of **Monarch Butterfly** is cause for great concern. Peak count of only 11 on September 22, total for season was less than 100! A rare and exciting sighting of **Luna Moth** during early evening hour on August 31.

A “**Big Round of Applause**” to those volunteer counters who took on the extra duties of recording the hourly data during their shift. We extend a special thanks to all the volunteer counters and observers for what proved to be a challenging season: **Mark Adams, Gordy Adamski, Pat Alther, Mike Boatwright, Marissa Benavente, Robert Butler, Andrew Clem, Marlene Condon, Jim Fitzgerald, Bill Funk, Jennifer Gaden, William (Bill) Gallagher, Dave Hunter, John Irvine, Mark Johnson, Lynn Juliano, Allen Lerner, Nelson Lewis, Tom Lord, Clair Mellinger, Tom Mizell, Tom Pendleton, Robert Plank and Charles Ziegenfus.**

We also extend special thanks to our three sponsors -- **Augusta Bird Club, Monticello Bird Club and Rockingham Bird Club** and to our host, the management and staff of **The Inn at Afton.**



2004 Daily Count

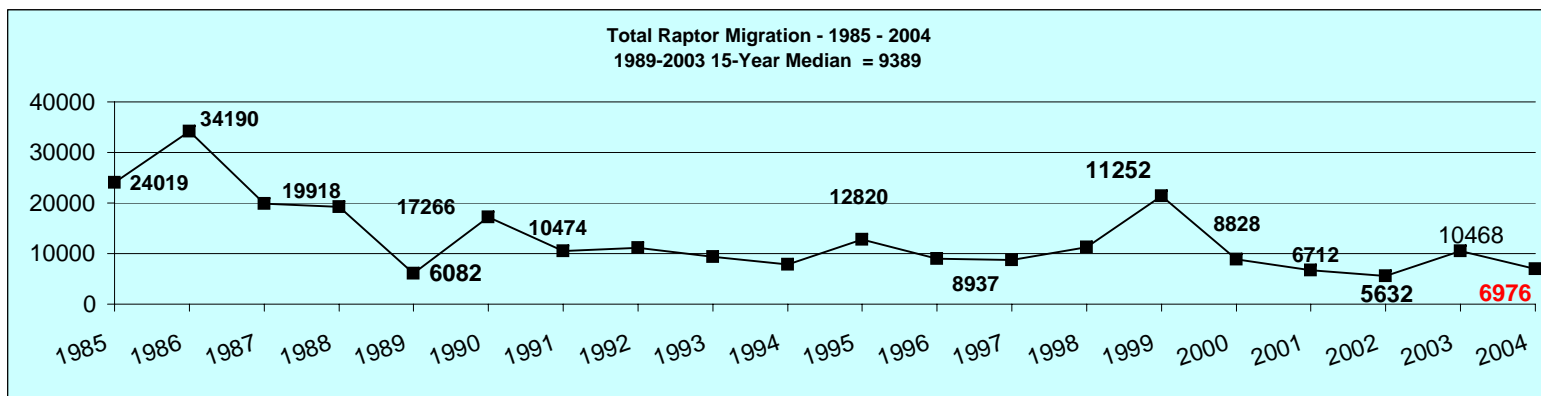
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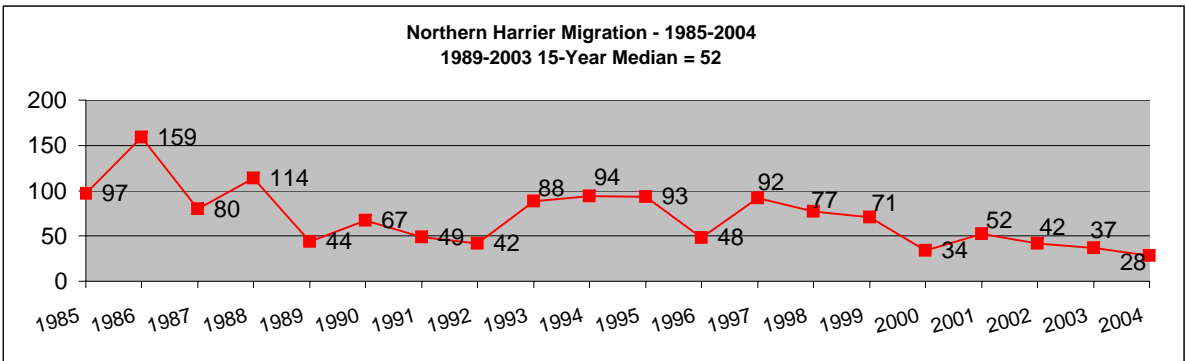
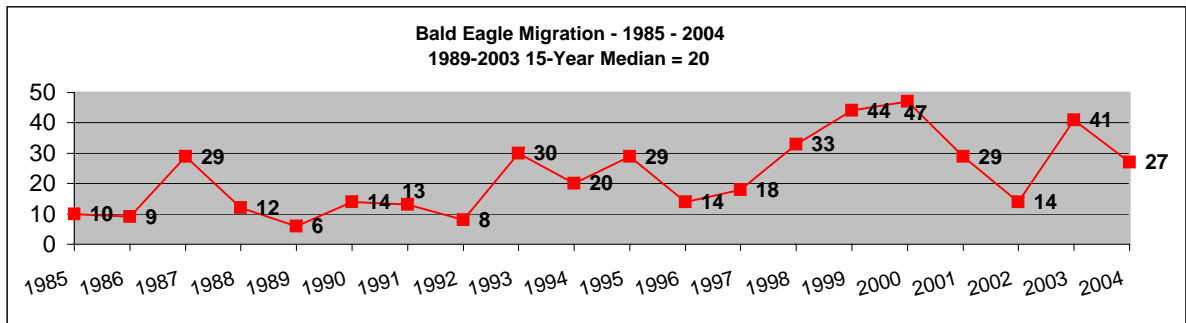
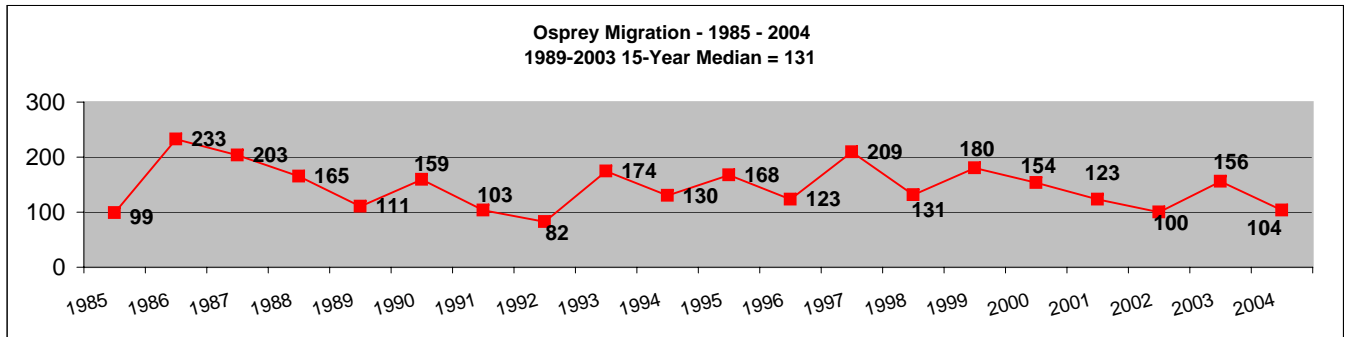
	Date	Total Minutes	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	MK	Total	Official Counter	Observers	
Fri	13-Aug	240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	WG	
Sat	14-Aug	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	BT (rain)	WG
Sun	15-Aug	495	1	1		3	1			41	3									50	BT	GA
Mon	16-Aug	330				1				2	2									5	WG, AL	
Tue	17-Aug	240																		0	WG	
Wed	18-Aug	30	1																	1	BT	
Thu	19-Aug	0																		0	NO COVERAGE	
Fri	20-Aug	345		2			4			8	2						1			17	WG, AL	
Sat	21-Aug	0																		0	CANCELED-RAIN	
Sun	22-Aug	480		1	1	2				10	5						1			20	WG, BT	GA, MJ
Mon	23-Aug	480	2			1														3	WG	TP
Tue	24-Aug	180	1			1	2				2									6	AL, BT	
Wed	25-Aug	60								1	1									2	BT	
Thu	26-Aug	390	1		1					1				1			3			7	TM,RP,BT	WG
Fri	27-Aug	480		1			1			2										4	WG	TP, RP
Sat	28-Aug	525	3	1	2	3				23	1			3	1		4			41	GA	RP, BT
Sun	29-Aug	420				3				61	2			2						68	GA,BT	MJ, RM, CZ
Mon	30-Aug	240																		0	WG	
Tue	31-Aug	4 80	1	1		3				8	2									15	AL, RB, BT	WG
AUG Total		5085	10	7	4	17	8	0	0	157	20	0	0	6	1	0	9	0	239			
Wed	1-Sep	465	1			6				10										17	JF	RP
Thu	2-Sep	300								2										2	TP	
Fri	3-Sep	240	1	1		1														3	WG	RP
Sat	4-Sep	480	2						1	49	2			3						57	GA	JF, TP, BT
Sun	5-Sep	420				4				64	1			3			1			73	BT	RM
Mon	6-Sep	0																		0	CANCELED RAIN	
Tue	7-Sep	0																		0	CANCELED-RAIN-FRANCES	
Wed	8-Sep	0																		0	CANCELED-RAIN-FRANCES	
Thu	9-Sep	360	3	2		1				2										8	WG, RP	
Fri	10-Sep	420	1							10				2						13	WG, MB	
Sat	11-Sep	465	9		4	2	2			124	5			3						149	BT	GA, RB, MC, DH
Sun	12-Sep	525	8	1	4	5	1			128	3			1	1	1				153	BT	
Mon	13-Sep	420	3			2	1			27										33	WG	
Tue	14-Sep	300													1					1	WG	
Wed	15-Sep	195																		0	WG	
Thu	16-Sep	240				4				12										16	WG, JG	RP
Fri	17-Sep	0																		0	CANCELED -RAIN-IVAN	
Sat	18-Sep	375	19	3		15	1		1	917				6		1	3			966	BT	JF, MB, NL, BF
Sun	19-Sep	675	12	3		15	3			1068	3		2	3	1		5			1115	BT	PA, GA, JF, MB, RP, DL, EL
Mon	20-Sep	600	6	1	1	6	2			1014	2				1		1			1034	WG, BT	GA, MB, JF, RP
Tue	21-Sep	510		1		26	3			315	1			2		1				349	WG	GA, AC, ND, AL, DL, RP, BT
Wed	22-Sep	630				30	3			39	1				1		3			77	JG, GA	WG, BT, RP
Thu	23-Sep	570	2		1	16	3			58	2									82	GA, BT	ET, BT, ND, RP
Fri	24-Sep	555	2			25				84	1									112	WG, GA	DH, DL, ND, BT
Sat	25-Sep	570	4	1		63	6			466				2		3	1			546	BT	DL, EL, MA, LG, DH, CZ
Sun	26-Sep	390	1			29	1			12				2						45	BT	PA, RP, LJ, CM
Mon	27-Sep	0																		0	CANCELED:RAIN-JEANNE	
Tue	28-Sep	0																		0	CANCELED-RAIN-JEANNE	
Wed	29-Sep	330	9			31	1			1										42	JG, RP	
Thu	30-Sep	0																		0	NO COVERAGE	
SEP TOTAL		10035	83	13	10	281	27	0	2	4402	21	0	2	27	5	6	14	0	4893			
SUBTOTAL		15120	93	20	14	298	35	0	2	4559	41	0	2	33	6	6	23	0	5132			
			OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	MK				

	Date	Total Minutes	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	MK	Total	Official Counter	Observers
Fri	1-Oct	300				5													5	WG	
Sat	2-Oct	120	2		1	11	2			2				3	1	2	1		25	BT	DH (morning fog)
Sun	3-Oct	240	1	1		62	11		1	8				4					88	BT	(morningfog) PA
Mon	4-Oct	150				77	8				1			2					88	BT	no morning coverage
Tue	5-Oct	360		2	2	9	1			1	2						4		21	AC	RP, TL
Wed	6-Oct	450			2	6	3	1		1							2		15	JL, TP	
Thu	7-Oct	60				3	1				2								6	BT	no morning coverage
Fri	8-Oct	240				6													6	TP	RP
Sat	9-Oct	360				27	8				1								36	BT	GA, RP
Sun	10-Oct	405	2			29	7			1	27				1				67	BT	PA
Mon	11-Oct	480		1		10	1				5								17	MA, WG	JL
Tue	12-Oct	300			2	5	2										1		10	AC	
Wed	13-Oct	0																	0		CANCELED-RAIN
Thu	14-Oct	0																	0		NO COVERAGE
Fri	15-Oct	240				2					4								6	WG	
Sat	16-Oct	360	1			81	8				6				1				97	GA	BT
Sun	17-Oct	390	3	1		196	22		1		25			9	2	1	3		263	BT	GA
Mon	18-Oct	240				3	2				2								7	WG	
Tue	19-Oct	240				2								1					3	AC	FOG in afternoon
Wed	20-Oct	0																	0		CANCELED-RAIN/FOG
Thu	21-Oct	0																	0		CANCELED-RAIN/FOG
Fri	22-Oct	0																	0		MORNING FOG
Sat	23-Oct	15									1								1	GA,BT	FOG, CLOUDS
Sun	24-Oct	0																	0		CANCELED-RAIN/FOG
Mon	25-Oct	0																	0		CANCELED-RAIN/FOG
Tue	26-Oct	0																	0		CANCELED-FOG
Wed	27-Oct	150																	0	JG	CLOUDS
Thu	28-Oct	0																	0		CANCELED-RAIN/FOG
Fri	29-Oct	0																	0		FOG-AM; NO COVERAGE PM
Sat	30-Oct	330			5	49	15		4		110			4			1		188	GA,BT	
Sun	31-Oct	495	1			69	15	1	2		542			3	2	1			636	BT	GA,MJ
OCT TOTAL		5925	10	5	12	652	106	2	8	13	728	0	0	26	7	4	12	0	1585		
SUBTOTAL		21045	103	25	26	950	141	2	10	4572	769	0	2	59	13	10	35	0	6717		
Mon	1-Nov	360	1	1		9			2		62								75	WG,TL	
Tue	2-Nov	120									1								1	RP	
Wed	3-Nov	105					1				25								26	BF	
Thu	4-Nov	0																	0		CANCELED-RAIN/FOG
Fri	5-Nov	0																	0		NO COVERAGE
Sat	6-Nov	375			1	11	2		2		66			1					83	BT	GA
Sun	7-Nov	360		1	1	5	1		1		25			3		1			38	BT	BF
Mon	8-Nov	240							1		20			1					22	WG	
Tue	9-Nov	0																	0		NO COVERAGE
Wed	10-Nov	0																	0		NO COVERAGE
Thu	11-Nov	0																	0		NO COVERAGE
Fri	12-Nov	0																	0		CANCELED-RAIN/FOG
Sat	13-Nov	60									6								6	BT	Very windy
Sun	14-Nov	0																	0		NO COVERAGE
Mon	15-Nov	240									8								8	WG	
Tue	16-Nov	0																	0		NO COVERAGE
Wed	17-Nov	0																	0		NO COVERAGE
Thu	18-Nov	0																	0		NO COVERAGE
Fri	19-Nov	135																	0	WG	Canceled-Rain
Sat	20-Nov	0																	0		CANCELED-RAIN/FOG
Sun	21-Nov	0																	0		NO COVERAGE
NOV TOTAL		1995	1	2	2	25	4	0	6	0	213	0	0	5	0	1	0	0	259		
TOTAL		23040	104	27	28	975	145	2	16	4572	982	0	2	64	13	11	35	0	6976		
		Minutes	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR	MK	YTD		
Total Hours		384	MA-Mark Adams, GA-Gordy Adamski, MB-Mike Boatwright, MB-Marissa Benavente, RB-Robert Butler, AC-Andrew Clem, MC-Marlene Condon, JF-Jim Fitzgerald, BF-Bill Funk, WG-William Gallagher, LJ-Lynn Juliano, JL-John Irvine, DH-Dave Hunter, MJ-Mark Johnson, AL-Allen Lerner, TL-Tom Lord, CM-Clair Mellinger, TM-Tom Mizell, NL-Nelson Lewis, TP-Tom Pendleton, RP-Robert Plank, BT-Brenda Tekin, CZ-Charles Ziegenfus																		
Total Days		69																			

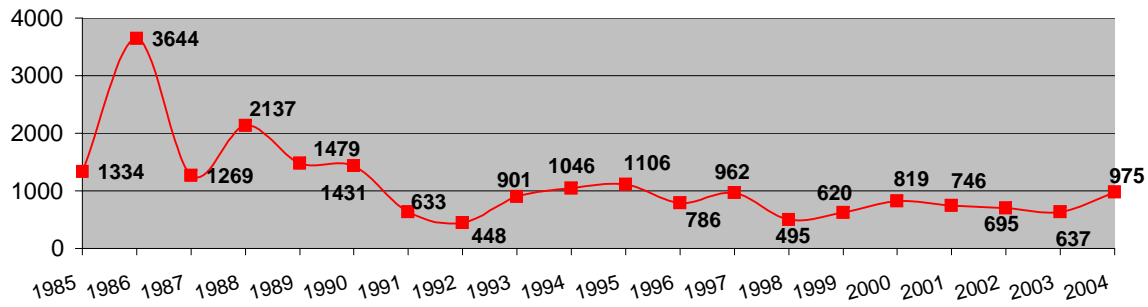
ROCKFISH GAP HAWK WATCH YEARLY TOTALS - 1976 - 2004

Year	Day	Hours	BV	TV	OS	MK	BE	NH	SS	CH	NG	RS	BW	SW	RT	RL	GE	AK	ME	PG	UN	Total
1976	1	6	0	11	1	0	0	2	18	2	0	2	713	0	11	0	0	1	0	0	4	765
1977	4	22	5	10	3	0	0	1	41	2	0	0	1142	0	4	0	0	4	0	0	21	1233
1978	2	12	6	18	2	0	0	0	34	0	0	0	32	0	16	0	0	2	0	0	12	122
1979	8	38	41	29	20	0	0	2	60	8	0	1	2094	0	24	0	0	4	0	0	14	2297
1980	11	67	55	120	30	0	1	7	149	9	0	1	7810	0	16	0	1	5	2	0	17	8223
1981	12	88	71	36	83	0	3	12	533	20	0	3	9058	0	23	0	0	36	1	0	19	9898
1982	19	139	6	0	67	0	0	2	351	10	0	0	4734	0	7	0	0	32	1	0	5	5215
1983	68	439	96	404	62	0	5	48	1194	6	1	3	14644	0	1453	1	1	57	0	0	54	18029
1984	28	171	7	241	75	0	3	10	440	14	0	5	9858	0	179	0	1	22	1	1	39	10896
1985	66	377	0	237	99	0	10	97	1334	32	2	21	19936	0	2101	0	5	68	3	5	69	24019
1986	73	469	61	516	233	0	9	159	3644	51	3	40	27755	0	1334	0	5	260	8	5	107	34190
1987	65	318	24	102	203	0	29	80	1269	87	4	29	17119	0	759	0	3	159	8	4	39	19918
1988	96	600	177	375	165	0	12	114	2137	103	3	40	14186	0	1643	0	8	151	9	3	120	19246
1989	68	371	41	315	111	0	6	44	1479	86	2	35	3089	0	686	0	6	85	0	8	89	6082
1990	69	392	5	18	159	0	14	67	1431	119	4	35	14735	0	443	0	5	107	4	5	115	17266
1991	44	250	0	2	103	0	13	49	633	37	1	17	9386	1	119	1	3	61	3	5	40	10474
1992	46	246	2	207	82	0	8	42	448	85	0	18	10020	0	189	0	1	33	7	6	39	11187
1993	93	669	105	1020	174	0	30	88	901	98	3	63	6031	0	668	0	6	57	5	7	133	9389
1994	97	667	322	868	130	0	20	94	1046	199	9.2	60	4198	2	603	1	4	94	16	11	178	7855
1995	92	576	144	504	168	0	29	93	1106	207	2	50	9012	0	1181	1	6	104	20	34	159	12820
1996	84	532	122	560	123	0	14	48	786	173	7	40	5746	0	1066	0	17	85	4	13	133	8937
1997	82	523	233	596	209	0	18	92	962	289	1	26	5430	0	566	0	5	88	13	38	165	8731
1998	83	529	222	538	131	1	33	77	495	154	0	31	8827	0	528	0	6	91	20	17	81	11252
1999	74	473	344	530	180	0	44	71	620	140	15	42	18447	0	747	0	5	96	12	18	94	21405
2000	86	536	63	228	154	0	47	34	819	271	5	28	6502	0	438	0	4	106	15	26	88	8828
2001	81	475	58	87	123	0	29	52	746	206	5	38	4569	0	582	1	3	100	17	23	73	6712
2002	64	339			100	1	14	42	695	121	6	25	3650	0	807	0	4	101	6	23	37	5632
2003	67	333			156	1	41	37	637	159	6	20	8754	0	450	0	7	112	23	28	37	10468
2004	69	384			104	0	27	28	975	145	2	16	4572	0	982	0	2	64	13	11	35	6976
Totals	1652	10041	2210	7572	3250	3	459	1492	24983	2833	81	689	252049	3	17625	5	108	2185	211	291	2016	300621
#Days	Hours	BV	TV	OS	MK	BE	NH	SS	CH	NG	RS	BW	SW	RT	RL	GE	AK	ME	PG	UN	Total	
15-yr avg	523			131	0	20	52	786	154	4	35	6502	0	582	0	5	94	12	17	89	9389	

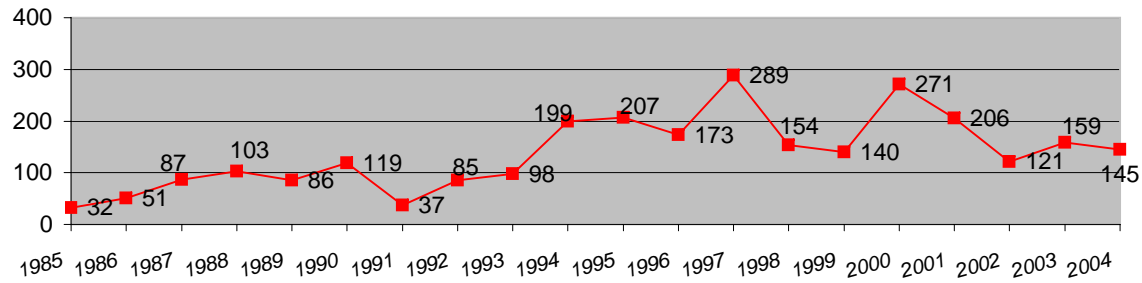




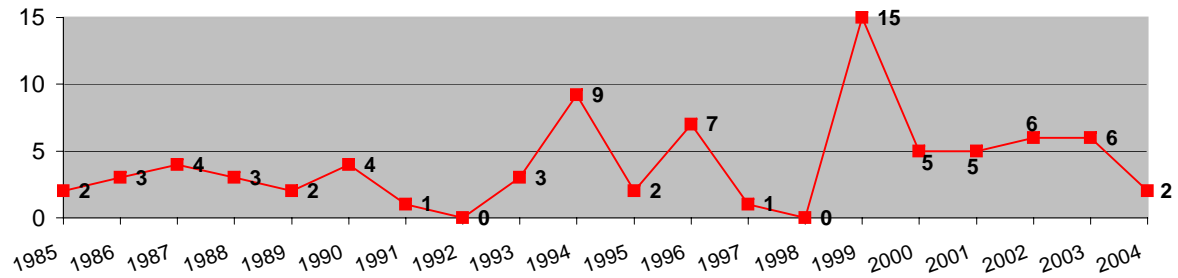
Sharp-shinned Migration - 1985 - 2004
1989-2003 15-Year Median = 786



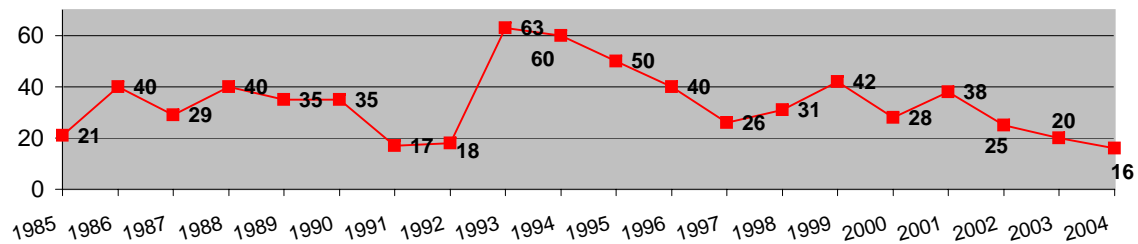
Cooper's Hawk Migration - 1985-2004
1989-2003 15-Year Median = 154



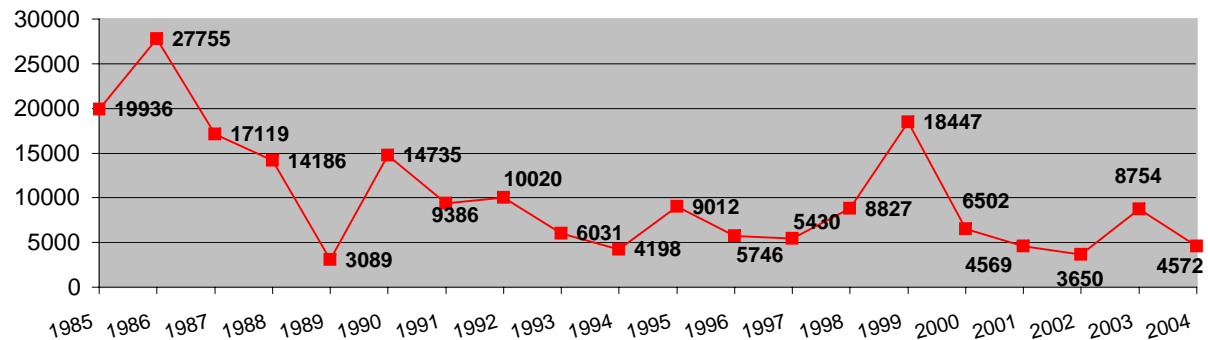
Northern Goshawk Migration - 1985-2004
1989-2003 15-Year Median = 4



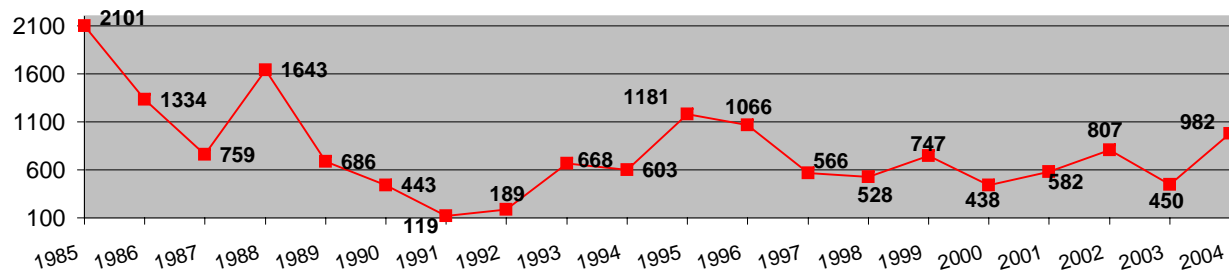
Red-Shouldered Migration - 1985 - 2004
1989-2003 15-Year Median = 35



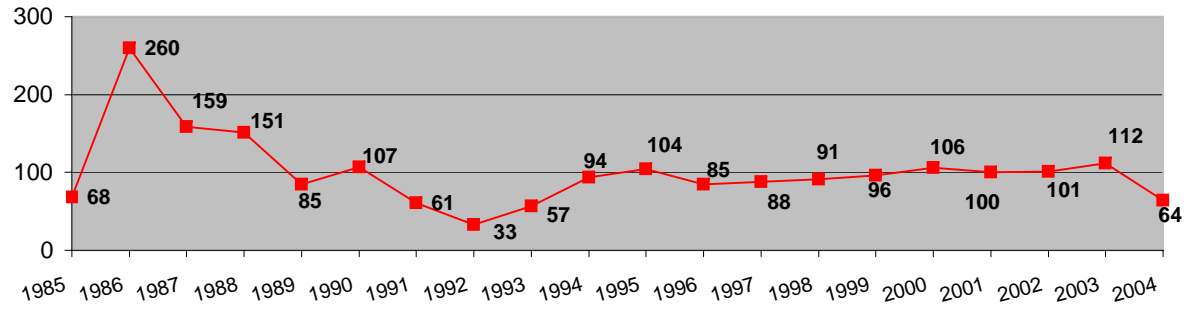
Broad-winged Hawk Migration - 1985-2004
1989-2003 15-Year Median = 6502



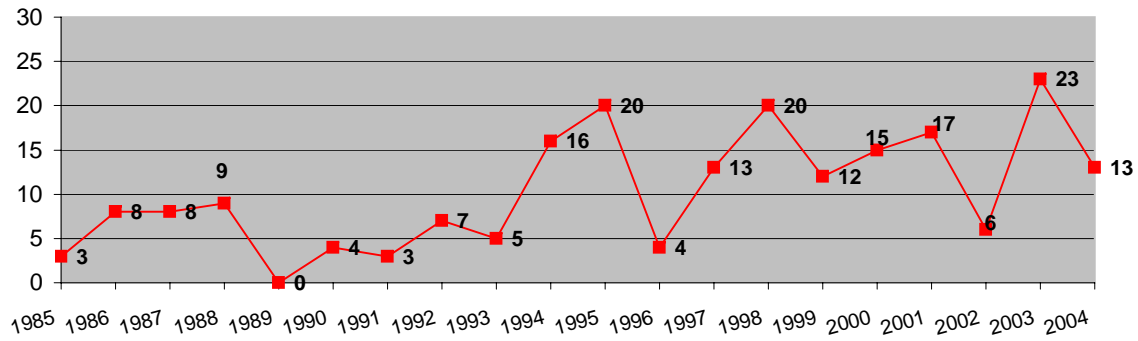
Red-tailed Hawk Migration - 1985 - 2004
1989-2003 15-Year Median = 582



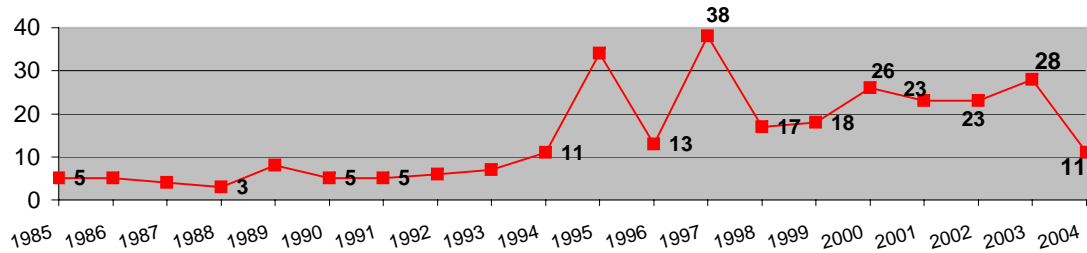
American Krestrel Migration - 1985 - 2004
 1989-2003 15-Year Median = 94



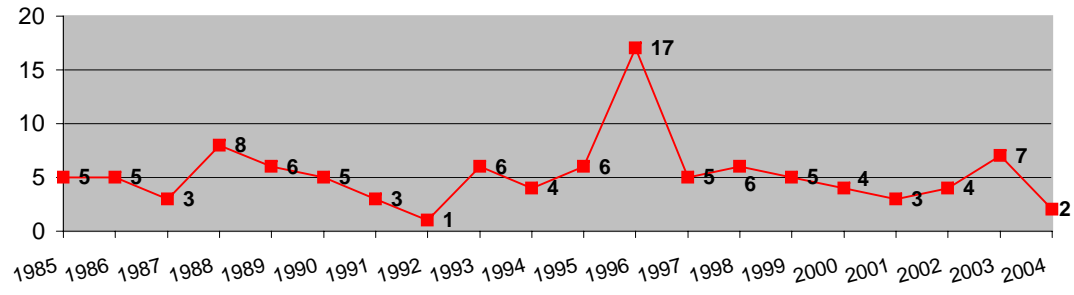
Merlin Migration - 1985-2004
 1989-2003 15-Year Median = 12



Peregrine Migration - 1985 - 2004
 1989-2003 15-Year Median = 17



Golden Eagle Migration - 1985-2004
1989-2003 15-Year Median = 5



SINGLE DAY RECORDS AT ROCKFISH GAP HAWK WATCH -2004

(Up to five highest counts are listed in each case.)

Osprey: 37 on 9/20/98, 35 on 9/19/97, 32 on 9/18/94, 33 on 9/28/03, 27 on 9/21/00 and 9/22/87.

Earliest: 1 on 8/14/01. Latest: 2 on 11/10/99.

Mississippi Kite: Three records: 1 each on 8/29/03, 9/2/02 and 10/17/98.

Earliest: 1 on 8/29/03. Latest: 10/17/98.

Bald Eagle: 8 on 9/20/99, 7 on 9/23/03, 6 on 9/23/03, 9/15/00 and 9/18/99; 5 on 9/15/87 and 9/12/98; 4 each on 9/6/00, 9/7/00, 9/17/00, 9/21/00, 11/10/99, 9/13/98, 9/7/98, 9/19/95, 9/14/95, 9/19/93, 9/15/90, and 9/16/87.

Earliest: 1 on 8/14/00. Latest: 1 on 11/21/03.

Northern Harrier: 23 on 9/23/86, 20 on 9/18/99, 16 on 9/16/87 and 9/11/85, 13 on 9/19/97 and 9/17/86.

Earliest: 1 on 8/17/99. Latest: 1 on 12/1/95.

Sharp-shinned Hawk: 509 on 10/4/86, 408 on 10/5/86, 403 on 9/25/86, 265 on 9/23/86, 256 on 10/20/89.

Earliest: 2 on 8/14/00. Latest: 2 on 12/3/88.

Cooper's Hawk: 43 on 10/4/94, 33 on 10/14/00, 32 on 9/30/00, 26 on 10/15/00 and 10/15/95, 25 on 9/24/99.

Earliest: 1 on 8/15/04. Latest: 1 on 11/30/89.

Northern Goshawk: 3 on 10/23/99, 2 on 10/5/02, 10/15/00, 11/17/99, 10/30/99, 10/16/99, 9/25/99, 10/31/96 and 10/30/96.

Earliest: 1 on 9/1/03 and 9/1/01. Latest: 1 on 12/5/87.

Red-shouldered Hawk: 22 on 10/19/86, 13 on 11/9/91, 11 on 11/1/93, 9 on 11/10/96 and 10/4/94, 8 each on 9/18/94 and 11/2/93.

Earliest: 2 on 8/23/95 and 8/23/85. Latest: 1 on 11/30/89.

Broad-winged Hawk: 11,783 on 9/16/86, 10,596 on 9/15/83, 8,555 on 9/12/85, 6,113 on 9/13/85, 4,931 on 9/19/99.

Earliest: 3 on 8/14/00. (Although not earliest, 41 on 8/15/04) Latest: 1 on 10/29/88.

Swainson's Hawk: Two records: 2 on 9/5/94 and 1 on 9/9/92.

Red-tailed Hawk: 751 on 11/6/85, 542 on 10/31/04, 284 on 10/26/83, 272 on 10/27/89, 238 on 11/2/02.

Earliest: 3 on 8/15/2004. Latest: 1 on 12/11/94.

Rough-legged Hawk: Five records: 1 on 10/6/01, 11/22/95, 11/8/94, 11/17/91 and 11/9/83.

Golden Eagle: 4 on 11/12/96, 3 on 10/30/96, 2 each on 10/27/02, 10/30/99, 11/7/99, 10/31/98, 11/6/96, 10/23/96, 10/30/91, 12/21/89, 11/7/88, and 10/29/85.

Earliest: 1 on 8/24/03 (adult). Latest: 1 on 12/11/94.

American Kestrel: 72 on 10/5/86, 58 on 10/4/86, 53 on 10/5/02, 35 each on 9/13/88 and 9/18/87, 33 on 9/27/86.

Earliest: 1 on 8/14/00. Latest: 2 on 11/27/85.

Merlin: 7 on 10/15/95; 4 on 10/12/03, 3 each on 9/23/03, 9/29/97, 10/28/95, 9/18/94, and 9/13/87.

Earliest: 1 on 8/23/98. Latest: 2 on 11/24/88

Peregrine Falcon: 9 on 9/28/03, 6 on 10/6/02, 5 on 10/5/02, 10/4/00, 10/2/99, 9/23/95 and 9/22/82; 4 on 10/9/97, 10/7/95, 10/6/95, 9/19/95, 9/14/95, and 9/17/89.

Earliest: 1 on 8/19/00. Latest: 1 on 11/21/03.

Total Raptors for a single day (currently includes vultures): 11,849 on 9/16/86, 10,611 on 9/15/83, 8,631 on 9/12/85, 6,113 on 9/13/85, 4,987 on 9/19/99.

Highest number of raptor species seen in a single day (excluding vultures): 12 on 9/25/99, 11 on 10/3/99, 10 each on 9/30/00, 10/1/99, 10/9/98, 9/20/98, 9/25/97, 9/19/97, 9/7/94, 9/5/94, and 11/1/93.