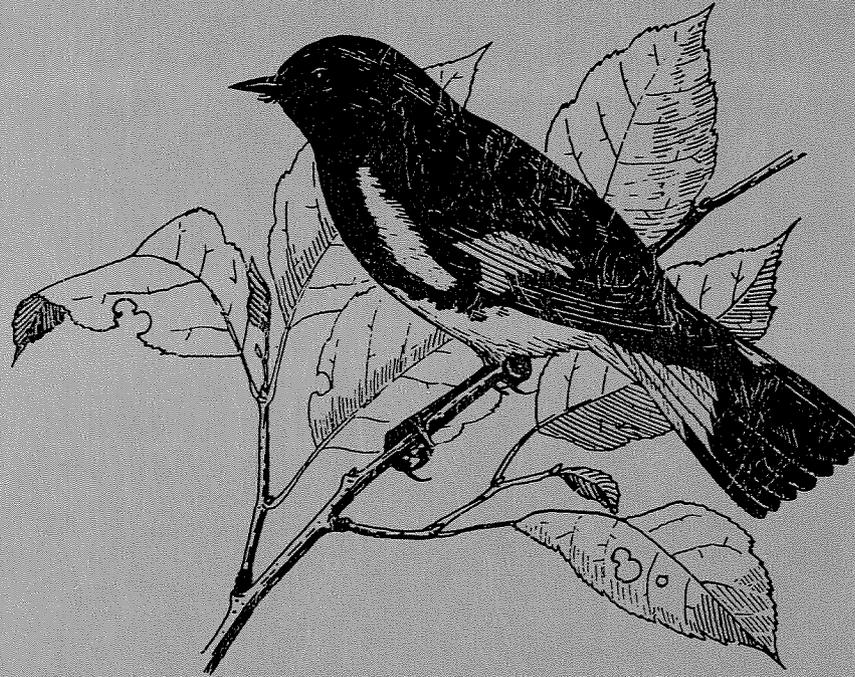


ISSN: 0034-2165

The **REDSTART**

VOLUME 57, NUMBER 2

APRIL, 1990



PUBLISHED BY THE BROOKS BIRD CLUB

The Brooks Bird Club, Inc.

Founded September 1932
Named in honor of A.B. Brooks, Naturalist

OFFICERS

President	Robert Hogan, Rt. 11, Box 203, Roanoke, VA	25705	703-992-4936
Pres. Elect	Charles Pierce, Rt. HC 38, Box 372, Winchester, VA	22601	703-667-3184
Vice Pres.	Carl Slater, 57290 Mehlman Road, Bellaire, OH	43906	614-635-9246
Imm. Past Pres.	Nevada Laitsch, 1203 East Park Blvd., East Liverpool, OH	43920	216-385-0582
Administrator	Helen Conrad, Rt. 1, Box 116, Triadelphia, WV	26059	304-547-5253
Treasurer	Richard Hogg, 39 Warwood Terrace, Wheeling, WV	26003	304-277-3082
Asst. Treas.	Ann Hogg, 39 Warwood Terrace, Wheeling, WV	26003	304-277-3082
Recording Sec.	Jane Anderson, 2042 Weberwood Dr., So. Charleston, WV	25303	304-344-1446
Membership Sec.	Helen Conrad, Rt. 1, Box 116, Triadelphia, WV	26059	304-547-5253
Editor REDSTART	A.R. Buckelew, Jr., Box J, Bethany, WV	26032	304-829-4392
Editor MAIL BAG	Robert Rine, 157 Beacon Drive, Weirton, WV	26062	304-723-2205

BOARD OF DIRECTORS

Serve Through:			
1990	Kay Dunnell, 167 Chapel Road, Wheeling, WV	26003	304-233-2428
	Charles Bedford, 1025 49th St., N.W., Canton, OH	44709	216-499-7847
1991	Ivarean Pierce, Rt. HC 38, Box 372, Winchester, VA	22601	703-667-3184
	Betty Weimer, 83 Boggess St., Buckhannon, WV	26201	304-379-4033
	LeJay Graffious, P.O. Box 69, Bruceton Mills, WV	26525	304-379-4492
1992	JoAnn Graham, R.D. 1, Box 543, Industry, PA	15052	412-643-4714
	James Bullard, 17107 New Hampshire Ave., Silver Spring, MD	20904	301-421-9108
	Thomas R. Fox, Rt. 1, Box 420, Millstone, WV	25261	304-354-7686

TRUSTEES

1990	William Grafton, 243 Wagner Rd., Morgantown, WV	26505	304-292-0229
1991	William Murray, 1000 Ridge Ave., P.O. Box 944, New Cumberland, WV	26047	304-564-5071
1992	Gerald A. Devaul, 17 Mozart Rd., Wheeling, WV	26003	304-233-4133

ADVISORS

Pete Chandler, 239 Virginia Ave., Chester, WV	26034	304-387-0117
Ralph Bell, RD 1, Box 229, Clarksville, PA	15322	412-883-4505
Kenneth Anderson, 2042 Weberwood Dr., So. Charleston, WV	25303	304-344-1446

COMMITTEE CHAIRPERSONS

Budget	George Hurley, Rt. 3, Box 85-A, Moorefield, WV	26836	304-434-2705
Membership	Helen Conrad, Rt. 1, Box 116 Triadelphia, WV	26059	304-547-5253
Research	George Hall, PO Box 6045, WVU, Morgantown, WV	26506	304-594-2521
Foray Directors	George Hurley, Rt. 3, Box 85-A, Moorefield, WV	26836	304-434-2705
	Anne Eddy, 2618 Glengyle Dr., Vienna, VA	22180	703-281-3455
Foray Sites	William Grafton, 243 Wagner Rd., Morgantown, WV	26505	304-292-0229
Land Acquisition	Eleanor Bush, 5 Bush Ave., Philippi, WV	26416	304-457-3460
Backyard Sancty.	Dorothy Conrad, 423 Warwood Ave., Wheeling, WV	26003	304-277-2036
Club Library	Dorothy Broemsen, 15 Mozart Rd., Wheeling, WV	26003	304-232-6694
Publicity	Robert Rine, 157 Beacon Dr., Weirton, WV	26062	304-723-2205
Legal Advisor	Hugh Troth, 429 N. Woodhill Dr., Ashland, OH	44805	419-289-1640
Nest Card Program	Bernard Trott, RD 1, Box 114, Triadelphia, WV	26059	304-547-0547
Christmas Count	Leon Wilson, Box 105, Ona, WV	25545	304-743-4013
Special Events	Pat Temple, 506 Hazlett Ave., Wheeling, WV	26003	304-277-3117
Atlas Project	A.R. Buckelew Jr., PO Box J, Bethany, WV	26032	304-829-7629

The REDSTART

VOLUME 57, NUMBER 2

APRIL, 1990

Editorial Staff

Editor
Albert R. Buckelew, Jr.
Biology Department
Bethany College
Bethany, W.Va. 26032
Field Notes Editor
James D. Phillips
900 Reynolds Ave.
Princeton, W.Va. 24740
Banding News Editor
Ralph K. Bell
R.D. 1 Box 229
Clarksville, Pa. 15322
Advisory Editorial Board
Eleanor Bush, Greg Eddy,
George A. Hall, George F. Hurley,
Nevada Laitsch, Patricia Temple

Contents

	Page
A Buff-breasted Sandpiper and a Sanderling in Kanawha County, West Virginia —Hullet C. Good	43
A Brant Record for Morgan County, West Virginia —Mike Zagarella and Suzanne Offutt	44
Allegheny Front Migration Observatory: Fall Migration 1989 —George A. Hall	46
Some Observations on the Ruby-Throated Hummingbird Migration through the Allegheny Front of West Virginia —Melvin T. Hooker	50
Field Notes —James D. Phillips	54
Banding News —Ralph Bell	57
Book Reviews	59

THE REDSTART is published quarterly in January, April, July and October at 707 Warwood Ave., Wheeling, WV 26003. The journal of the Brooks Bird Club, it is mailed to all members in good standing. Non-member subscription price is \$14.00. Individual copies \$3.00 except the Foray issue which is \$5.00. Changes of address and requests for back issues should be mailed to 707 Warwood Ave., Wheeling, WV 26003. Articles for publication and books for review should be mailed to the Editor.
Printed by The Valley Press, Inc., Wellsburg, WV 26070

A Buff-breasted Sandpiper and a Sanderling in Kanawha County, West Virginia

Hullet C. Good

While returning home from a Sunday drive on May 7, 1989, we noticed a few shore birds probing for food around a very large puddle located alongside of Rt. 114, approximately 3 miles northeast of Charleston, West Virginia. This large puddle was formed by heavy spring rains following land excavation for the new Capital High School. I returned to the spot on May 13, parked my car at the upper end of the puddle, and checked out the migrant shorebirds with my 7 x 35 binoculars. I readily noted six Solitary and two Spotted Sandpipers. But the real surprise of the day was a small buffy sandpiper, having an erect stance, light eye-ring, and yellowish legs - a Buff-breasted Sandpiper. The only other reported sighting of this sandpiper in Kanawha County was at the home of Anne Shreve on Middle Ridge in April 1969.

Also present was a Sanderling, a small shorebird in summer plumage; being bright rusty on the head, back and breast. This observation is only the second record of the Sanderling in the immediate Kanawha Valley. J. Lawrence Smith noted a Sanderling at the large flyash pond of the FMC Corporation at South Charleston in September 1984.

References

- Hall, G.A. 1983. West Virginia Birds. Special Publication No. 7, Carnegie Museum of Natural History, Pittsburgh, Pa.
Smith, J.L. 1987. Shorebirds at South Charleston. *The Redstart* 54 (2):54-55.

3841 Indian Creek Road
Elkview, WV 25071

A Brant Record for Morgan County, West Virginia

Mike Zagerella and Suzanne Offutt

Mike saw the Brant for the first time on Tuesday, October 24 as he was driving Jade and Logan to the babysitter's. It was sitting in the grass near our lowest pond, about 20 feet from the road. We have approximately 50 acres located in the extreme southern corner of Morgan County about ¼ mile from the border with Virginia. There are three small ponds: the largest is about 50 yards behind the house and where our pair of White-crested ducks reside. The pond where he first saw the Brant is across an unpaved county road. Being a hillside birder, and relatively unfamiliar with the web footed varieties, Mike of course, thought it was a Canada. He pointed it out to the kids, we all got a good look, and then drove on. The next day it was near the pond behind the house - following our pair of ducks around. Something did look a bit odd about this goose, but our neighbor has a variety of domestic geese (some Canadas among them) and we began to think that it must be one of his - maybe a hybrid of some kind. It came up near the house with our ducks and was never spooked by human presence, nor did it seem to be bothered by our dogs. It always stayed a few paces behind the ducks, but went wherever they did, and ate the shelled corn we put out - after they were finished. We discussed the odd looks and behavior of the goose - but neither of us took the time to check a field guide. On Friday Mike left on a business trip - and Suzanne pulled out the field guide and identified it as a Brant. On Sunday, the 29th, she had occasion to talk with Bob Dean who informed her that we had a bit of a rarity on our hands. Since she also needed to talk with Jay Buckelew she told him about it too. Jay suggested that we take pictures and note any significant behaviors. On Sunday, when Mike returned, Suzanne filled him in on what she had learned about our visitor. On Monday Mike went out before he left for work and finished off the roll of film in his camera on the Brant. That was October 30th - and the last time we saw it. We didn't notice any bands on it's legs, but from the way it behaved around humans and dogs we suspect that it must have spent time in a park or some other high traffic situation. Lucky for us we had a really cooperative Brant or else it would have gone on its way being just another Canada Goose!



Brant at Berkeley Springs. Photo by Mike Zagerella

Allegheny Front Migration Observatory: Fall Migration 1989

George A. Hall

The thirty-second year of bird-banding at the Allegheny Front Migration Observatory, Grant County, W.Va., was the most disappointing year in the history of the station. The station was in continuous operation from August 13 to October 16, with two additional October days. The station was closed because of weather on seven days and so some banding was carried out on 60 days. The rains with hurricane "Hugo" closed operations for a day but no damage was done. There was snow on October 8 and also later in October.

A total of 4152 birds (second poorest year in which we have had full coverage) of 82 species were banded in a station effort of 5870 net-hours (second highest), giving a capture rate of 70.1 birds per 100 net-hours (lowest). Only 1553 birds were banded during September, usually the highest month. The big October flight of kinglets and juncos served to put the season totals in a better range. One new species, the Henslow's Sparrow was added to the station list, which now stands at 116 forms with 133,564 birds banded. The hummingbird count stood at 241 released from the nets and 297 flying past the station.

Seven birds banded in 1988 and one bird banded in 1987 were recaptured this year, but of special interest was a Common Yellowthroat originally banded on August 26, 1982 which was recaptured on August 16.

The early season had very poor results, and the highest daily count in August-September was 163 on September 10. Persistent high pressure areas dominated the Northeast, and for many days the wind came out of the East, which is unfavorable for captures at this station. In October there was one day of over 400 captures (486 on Oct. 13), one above 300 and only two above 200 captures. The chart below shows the seasonal pattern.

The most numerous species this year was the Golden-crowned Kinglet with 465 bandings (and 671 released unbanded). In second place was the Black-throated Blue Warbler with 440 banded (down 39% from last year and down 48% from the ten-year average. Swainson's Thrush, after having made some recovery last year, declined again and was 43% below the 10-year average. The biggest declines below the 10-year average were the Blackburnian Warbler (down 83%), the Bay-breasted Warbler (down 83%), and the Blackpoll Warbler (down 81%). Of the 42 species analyzed, 20 were the average numbers (within one Standard Deviation (S.D.) of the 15 year average); 15 were more than one S.D. below; and only seven were more than one S.D. above that average. Most of these seven were October migrants not well sampled before 1988. Four species (indicated with a (*) on the following list) were netted in record high numbers while 10 species (indicated with (†) in the following list) were banded in the lowest numbers since before 1973. There seems to be general agreement that bird populations (particularly warblers) are declining, but just how much this decline is responsible for our poor season and how much is the result of the unfavorable weather cannot be established at present.

During the season 1583 people signed the visitor's book. These visitors came from 15 states, the District of Columbia and from Denmark, East Germany, India, Japan, and Sri Lanka. As usual several elementary and high school classes visited the station.

The banders who participated this year were Walter Fye, Connie Skipper, Trudy Smith, Jo Lane Stern, Judy Ward, Leon Wilson, Charles Ziegenfus and station co-leaders Ralph Bell and George Hall. LeJay Graffious was again responsible for the shelter, and as usual Genevieve and John Findley were in charge of the net-lanes. Harriett and Mel Hooker and Ivarean Pierce provided assistance throughout the season, while Sue and Ken Heselton and Kathleen and Mike Finnegan were present for extended periods of time.

The following people aided in tending nets, collecting cages, keeping records and in many other ways: Ashton Berdine, Virginia Byers, Mike Clark, Carolyn Conrad, Dorothy Conrad, Helen Conrad, Dennis Dawson, Kathy Devaul, Cindy Ellis, Hal Findley, Jeff Findley, Jenny Findley, Dawn Fox, Jay Fox, Matt Fox, Tom Fox, Anabelle Fye, JoAnn Graham, Phil Graham, Mike Griffith, Linda Hollenberg, Patrick Hurley, June Huy, Jim Huy, Karen Huy, Mike Huy, Ray Kiddy, Richard Legg, Carol McCullough, Fred McCullough, Jason McCullough, Jack Minear, Jolene Minear, Jonathan Minear, Jaccalene Minear, Jonavieve Minear, Janice Musser, Ben Myers, Evelyn Myers, Eph Olliver, Bill Pflingsten, Charles Pierce, Charlotte Pryor, Patrick Rhoades, Beth Ritter, Randy Ritter, Carl Rowe, Ruth Rowe, Joe Schreiber, Dave Skinner, Susan Skinner, Earl Smith, Kevin Ward, Bill Wentzel, Cory Wentzel, Jim Wiley, Martin Wiley and Elsie Ziegenfus.

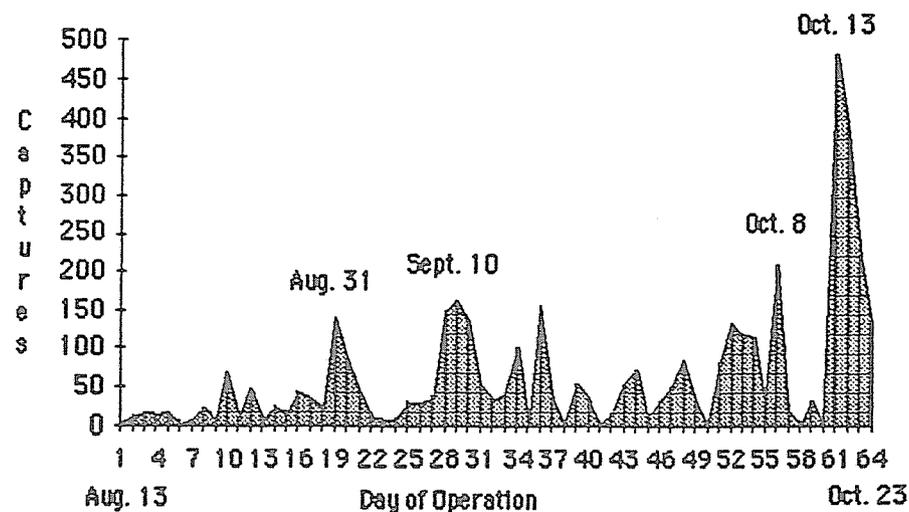
We also thank the personnel of the Monongahela National Forest: Supervisor Jim Page, District Ranger Jerry Bremer, Recreation Specialist Monica Galion, and others of the Potomac District Ranger Station for their cooperation and support. Thanks also to Walt Lesser of the D.N.R. for the use of the Laneville Cabin for housing and for storage of the shelter. The Brooks Bird Club supplied some financial support.

Extreme Dates, Numbers and Dates of Meaningful Peaks

	Number	First	Last	Peak No.	Date
Sharp-shinned Hawk	*8	Aug. 20	Oct. 14		
N. Saw-whet Owl	1	Sept. 15			
Yellow-bellied Sapsucker	3	Oct. 2	Oct. 14		
Downy Woodpecker	4	Sept. 11	Oct. 23		
Hairy Woodpecker	1	Aug. 22			
Northern Flicker	4	Sept. 26	Oct. 5		
Eastern Wood-Pewee	2	Aug. 22	Oct. 4		
Yellow-bellied Flycatcher	2	Aug. 24	Sept. 24		
Least Flycatcher	3	Aug. 24	Aug. 31		
Eastern Phoebe	2	Oct. 2	Oct. 14		
Blue Jay	152	Sept. 26	Oct. 16	51	Oct. 4
Black-capped Chickadee	10	Aug. 16	Sept. 28		
Tufted Titmouse	2	Aug. 28	Oct. 15		
Red-breasted Nuthatch	70	Sept. 6	Oct. 22	11	Oct. 8 & 11
White-breasted Nuthatch	1	Oct. 11			
Brown Creeper	8	Oct. 5	Oct. 22		

	Number	First	Last	Peak No.	Date
House Wren	1	Sept. 10			
Winter Wren	13	Sept. 14	Oct. 23		
Golden-crowned Kinglet	465	Sept. 27	Oct. 23	224	Oct. 13
Ruby-crowned Kinglet	*199	Sept. 25	Oct. 23	55	Oct. 13
Blue-gray Gnatcatcher	2	Aug. 20	Aug. 22		
Veery	12	Aug. 17	Oct. 14		
Gray-cheeked Thrush	12	Sept. 20	Oct. 2		
Swainson's Thrush	†247	Aug. 20	Oct. 15	24	Sept. 20
Hermit Thrush	34	Aug. 14	Oct. 22	12	Oct. 14
Wood Thrush	†19	Sept. 1	Oct. 5		
American Robin	14	Aug. 15	Oct. 23		
Gray Catbird	6	Aug. 14	Sept. 17		
Cedar Waxwing	2	Sept. 28	Oct. 2		
European Starling	1	Oct. 2			
White-eyed Vireo	1	Oct. 14			
Solitary Vireo	13	Aug. 17	Oct. 22		
Philadelphia Vireo	8	Aug. 31	Oct. 8		
Red-eyed Vireo	28	Aug. 31	Oct. 15		
Blue-winged Warbler	1	Oct. 8			
Tennessee Warbler	†350	Aug. 16	Oct. 22		
Orange-crowned Warbler	4	Oct. 11	Oct. 15		
Nashville Warbler	43	Aug. 31	Oct. 23	10	Oct. 4 & 8
Northern Parula	4	Sept. 2	Oct. 14		
Yellow Warbler	1	Aug. 31			
Chestnut-sided Warbler	24	Aug. 13	Oct. 8		
Magnolia Warbler	†87	Aug. 16	Oct. 13		
Cape May Warbler	†254	Aug. 22	Oct. 14	44	Aug. 31
Bl.-throated Blue Warbler	440	Aug. 15	Oct. 16	39	Sept. 9
Yellow-rumped Warbler	*219	Sept. 29	Oct. 16	123	Oct. 14
Bl.-throated Gr. Warbler	290	Aug. 17	Oct. 22	56	Oct. 8
Blackburnian Warbler	73	Aug. 17	Oct. 3	13	Aug. 31
Pine Warbler	2	Sept. 30	Oct. 15		
Prairie Warbler	1	Oct. 15			
Palm Warbler	*16	Sept. 12	Oct. 22		
Bay-breasted Warbler	†55	Aug. 30	Oct. 14	8	Sept. 12
Blackpoll Warbler	†15	Sept. 9	Oct. 16	30	Oct. 6
Black & White Warbler	15	Aug. 13	Oct. 14		
American Redstart	33	Aug. 17	Oct. 15		
Worm-eating Warbler	1	Aug. 15			
Ovenbird	†46	Aug. 15	Sept. 30		
Northern Waterthrush	3	Aug. 22	Sept. 21		
Louisiana Waterthrush	1	Aug. 21			
Connecticut Warbler	†1	Sept. 21			
Common Yellowthroat	112	Aug. 14	Oct. 14	11	Sept. 10
Hooded Warbler	9	Aug. 24	Sept. 17		
Wilson's Warbler	11	Aug. 22	Sept. 23		
Canada Warbler	8	Aug. 22	Sept. 1		
Rose-breasted Grosbeak	13	Aug. 20	Sept. 30	6	Sept. 29
Indigo Bunting	2	Aug. 16	Sept. 1		
Rufous-sided Towhee	20	Aug. 13	Oct. 15		
Chipping Sparrow	6	Sept. 29	Oct. 15		
Field Sparrow	14	Sept. 4	Oct. 16		
Vesper Sparrow	2	Sept. 9	Sept. 25		

	Number	First	Last	Peak No.	Date
Savannah Sparrow	5	Aug. 26	Sept. 9		
Henslow's Sparrow	1	Aug. 29			
Fox Sparrow	3	Oct. 5	Oct. 23		
Song Sparrow	22	Aug. 15	Oct. 16		
Lincoln's Sparrow	17	Sept. 1	Oct. 15		
Swamp Sparrow	12	Aug. 17	Oct. 15		
White-throated Sparrow	45	Sept. 30	Oct. 23	11	Oct. 14
White-crowned Sparrow	20	Oct. 3	Oct. 23	10	Oct. 14
Dark-eyed Junco	309	Aug. 13	Oct. 23	82	Oct. 16
Northern Oriole	1	Oct. 4			
Purple Finch	8	Aug. 28	Oct. 16		
Pine Siskin	1	Oct. 16			
American Goldfinch	21	Aug. 15	Oct. 22		



Dept. of Chemistry
West Virginia University
Morgantown, WV 26506

Some Observations on the Ruby-Throated Hummingbird Migration Through the Allegheny Front of West Virginia

Melvin T. Hooker

Most people interested in bird migration marvel at the great distances many birds travel between their northern breeding grounds and their southern winter habitats. For many, one of the most intriguing is the migration of the Ruby-throated Hummingbird (*Archilochus columbris*), smallest of all birds in the eastern half of the North American continent. This iridescent creature weighs only a few grams, yet is capable of flying the thousands of miles between the Maritime Provinces of Canada and Central America.

At the Allegheny Front Migration Observatory (AFMO), we have been equally intrigued. At a nearly 4000 foot elevation, surrounded by a typical Canadian Life Zone habitat, it might seem an unlikely place to observe this phenomenon, yet it has proven to be well-located in a southbound flyway for many hummingbirds.

We do not band hummingbirds at the AFMO, but for many years we have counted and logged this species on a daily basis. All staff members are keyed to report each occurrence. These are recorded on a "netted" or "flyover" basis. As a result, we have accumulated a good data base for analysis.

This paper covers five years of observation (1985-1989) during the fall migration period (August 15 - September 30). The average number of hummingbirds for each date (over this five-year period) is shown in Figure 1. This indicates a migration period of approximately three and a half weeks starting around August 25 and ending about September 17. Peak of the migration occurs during the first week of September. Though ragged, the graph indicates a definite curve. This might well smooth out if the study were extended over another five-year period.

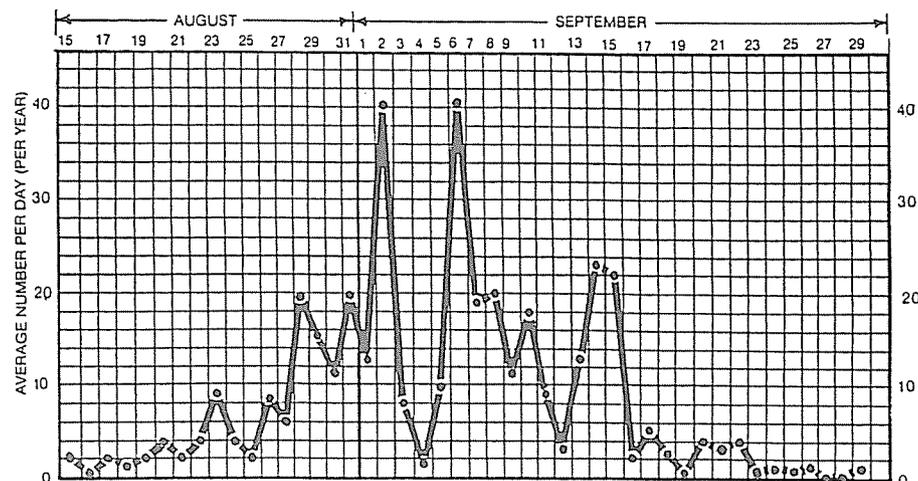


Figure 1 — Allegheny Front Migration Observatory, Grant County, West Va. Chart shows average number of hummingbirds observed and netted for each date during the years 1985 through 1989.

It is interesting to compare these results with a similar study made at the Hawk Mountain Sanctuary in Pennsylvania by L.A. Willimont, S.E. Senner and L.J. Goodrich⁸. This project also covered a five-year period (1979-1984). Their chart (Figure 2) shows birds per hour per day (averaged over the five-year period). This different method of calculation does not change the configuration. Their chart can be visually compared with ours. You will note a close similarity in spite of the two different time periods and locations in the Appalachian Mountains.

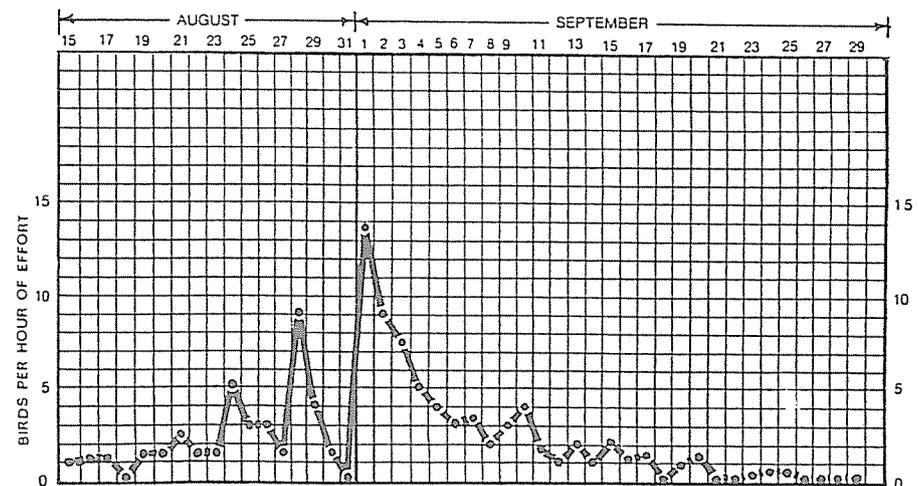


Figure 2 — Hawk Mountain Sanctuary on the Kittatinny Ridge, Pennsylvania. Hummingbird sightings during the migration period (1979-1984) Chart shows birds per hour for all birds combined⁸

This same peak period for the hummingbird southbound migration is further confirmed by Powdermill Nature Preserve located in the Ligonier Valley in Pennsylvania. In their 1985 Annual Report, Robert C. Leberman and Robert S. Mulvihill included a special report on the results of 13 years of hummingbird bandings (1963-1985). Here again the peak period occurs during the four-day period from August 30 through September 3. Their comprehensive study is based on a total of 3196 bandings.

Unfortunately our AFMO hummingbird log does not include a recorded time for each flyover or netted bird. However, we are fully aware that most occur well into the morning and continue into the afternoon. It is satisfying to have this observation confirmed by the Hawk Mountain study. They divided their sightings into three time frames as follows:

Time Period (EST)	Percent of Total Birds
06:00 - 09:59	11
10:00 - 13:59	71
14:00 - 17:59	18

Thus it might be assumed that if observers at the AFMO were to continue their watch through the afternoon (the banding station closes at noon), we might well double our number of sightings. But I don't think it would change either the duration or the peak days of the migration.

Warblers, thrushes and other passerines move much earlier in the day. Nets are opened in the dark to capture thrushes before sunrise. Warblers move soon after sunrise with flights peaking before 8:30 a.m. Calder² in 1974 observed, "with hummingbird's high rate of metabolism, and after a night of fasting, it is presumed the first daylight hours are spent feeding." Ralph Bell¹ also reports seeing hummingbirds feeding at first light several times this fall. These observations may explain why hummingbirds have not been reported feeding during their later daytime migration period.

The late-in-the-day movement raises a question. Do hummingbirds migrate only in the daytime? An examination of the results of four "tower kill" studies offers strong evidence that, unlike most passerines, they do not fly at night. This data provided by Ralph Bell, shows the following results:

Location	Total Birds Examined	Total No. of Species	Total No. of Hummingbirds
Seven South Michigan Towers (3)	6504	93	0
Elmira, New York TV Tower (7)	3862	44	0
Bath, Ontario Generating Sta. (6)	11230	64	0
V.A.B. Space Center, Florida (5)	5046	62	0

Hummingbird migration movements seem to be triggered by the same cold fronts that set passerines in motion. On the Allegheny Front, good banding days are usually signaled by moderate to strong west or northwest winds. Under such flying conditions, birds seem to be prompted into a southwest correctional course in their morning movement. Cut into the eastern face of the long mountain is a clearly defined draw running in this opportune direction. This new lead line directs the migrants through the banding station located at the top of the draw. On high capture days nearly all birds passing through are on this obvious southwest course. The

Ruby-Throated Hummingbird is no exception. During the period of this study there were 27 days in which 20 or more hummingbirds were reported. Of these days, 24 were marked with moderate to heavy west winds, one morning was calm, two only were marked with east to northeast winds, and 16 also produced well above average bandings for other species.

Hummingbirds in migration are easily seen and identified. For the most part they fly just above the small tree and shrub level. As a result, 32% of all reported hummingbirds are netted birds. (639 netted vs 1315 flyovers). This percentage of netted birds is extremely high when compared with warblers, for example. Some observers estimate warbler captures to be as low as 5-10% of the birds passing through. Hummingbirds in migration appear to be flying with a single purpose - to get from here to there in the shortest period of time. Their flight is totally unlike their erratic feeding movements. It can be likened to bees leaving and returning to the hive.

Here are some other observations on the hummingbird migration: The highest count day - 179 was on September 6, 1986. The last Hummingbird sighted on September 29, 1987. In spite of their size, hummingbirds have no great problem bucking heavy west winds as they clear the mountain top. This personal observation is confirmed by our second highest count day when 134 moved over the escarpment while quartering into 15-20 m.p.h. west winds.

The Ruby-Throated Hummingbird is an interesting and delightful bird totally unlike all others. Thousands of people find great pleasure in providing feeders and creating special gardens just to enjoy them in their back yards. How many understand and fully appreciate the long and hazardous journeys they must make each year just to survive?

Acknowledgements: Dr. George A. Hall for his review and very helpful suggestions. Ralph K. Bell for his review and research of the "tower kill" and Powdermill data.

References Cited

1. Bell, R. pers. comm.
2. Calder, W.A. 1974. Consequences of body size for avian energetics. In R.A. Paynter, Jr. (ed.), *Avian Energetics*, Nuttall Ornith. Club, Publ. 15. Cambridge, MA, pp. 86-151.
3. Caldwell, L.D. and G.J. Wallace. 1966. Collections of migrating birds at Michigan television towers. *Jack Pine Warbler* 44 (3):117.
4. Leberman, R.C. and R.S. Mulvihill. 1985. Powdermill Nature Preserve Annual Report. Carnegie Museum, Pittsburgh.
5. Taylor, W.K. and M.A. Kershner. 1986. Migrant birds killed at the Vehicle Assembly Building, John F. Kennedy Space Center. *J. Field Ornith.* 57:142-154.
6. Weir, R. 1977. Bird kills at the Lenox Generating Station spring and autumn 1977. *The Blue Bill* 24:40-42.
7. Wells, M. 1978. T.V. tower kills at Elmira. *The Kingbird* pp. 159-161.

Banding News

Ralph Bell, Editor
R.D. 1, Box 229
Clarksville, PA 15322



Jays through finches — A large movement of **Blue Jays** was noted in the Morgantown, Monongalia Co. area from September 20 to mid October (GB). **Red-breasted Nuthatches** had appeared by September 27 in Summers Co. (JP) and were widespread by the end of the period. **Brown Creepers** were present by October 28 (HG). **Winter Wrens** seemed especially plentiful in southern West Virginia (JP). A **Marsh Wren** was found at McClintic Wildlife Station on September 18 (TI). **Golden-crowned Kinglets** were very numerous in the south (JP). This species accounted for the highest number of birds banded at AFMO (GH). A total of 465 individuals were banded while another 671 were released unbanded!

Bell had his latest record for **Gray-cheeked Thrush** on October 29. AFMO data indicated a 43% decrease in **Swainson's Thrush** numbers when compared to the 10 year average (GH). Hundreds of **Amer. Robins** were in the Boaz, Wood Co. area (GB). Several areas reported large flocks of this species. Large numbers of **Cedar Waxwings** were found feeding on cedar berries at Sandstone Falls, Summers Co. on November 11 (JP). The only report of **Loggerhead Shrikes** was in the Peterstown, Monroe Co. area by Wendell Argabrite in September and October. Most of the vireos were gone by the second week of October except a **Red-eyed Vireo** found by Ralph Bell on October 26. AFMO banding data indicated a decrease in the numbers of several warbler species—**Black-throated Blues** down 40%, **Blackburnians** down 83%, **Bay-breasteds** down 83% and **Blackpolls** down 81% (GH). See elsewhere in **The Redstart** for the full AFMO report. Ralph Bell made an interesting observation from his banding data. He banded the most **Cape May Warblers** he had banded since 1983. All were banded before September 22, when Hurricane Hugo arrived. The 1983 birds were all banded after September 22.

Some tanagers were around during the first week of October. **Rose-breasted Grosbeaks** had left by the second week of October. The last report for **Indigo Buntings** was November 17 (TI). **Lark Sparrows** were reported in Harrisonburg, Va. (RBC) on October 26 and at McClintic Wildlife Station from September 14 to 20 (TI). **Lincoln's Sparrows** were seen in Mason, Cabell and Wayne counties during October (TI). **White-throated Sparrows** had reached several areas in the region by the third week of September. **Pine Siskins** arrived in some areas in early October and were widespread and rather numerous by the end of the period. There were a few scattered reports of **Evening Grosbeaks**.

Contributors — Allegheny Vistas (AV), Wendell Argabrite (WA), Ralph Bell (RB), Pam Beltz (PB), George Breiding (GB), Kyle Bush (KB), Hullet Good (HG), George Hall (GH), Virginia Bly Hoover (VH), Tom Igou (TI), Ann McRae (AM), Mountwood Bird Club (MBC), Barry Passmore (BP), Rockingham Bird Club (RBC) and Gary Worthington (GW).

Editor's note — Leon Wilson of Ona, West Virginia, a BBC member and bird bander, received the letter below from Brian Dalzell, Atlas Coordinator for the Canadian Maritimes Province. Mr. Dalzell recovered a band in northern New Brunswick that Leon had placed on an Evening Grosbeak at his home in Ona on April 9, 1988. It was recovered on June 16, 1989. Readers may be appalled at the lack of concern some people have for wildlife along the highway. The slaughter of Evening Grosbeaks discussed by Dalzell in his letter has been going on for years in that area. G. Hapgood Parks, a bander, wrote several articles on this subject for **EBBA News** during the 1966-69 period. Some of his comments in the July-August 1966 issue of **EBBA News** (Vol. 29 (4):55-56) follow: We were told that the large flocks of birds feeding on the gravel shoulders of the roads were actually a hazard to automobiles, and in many towns they were considered pests. One man told us, "Last year when I'd get home from a drive I had to dig Evening Grosbeaks out of my car's radiator and wash them off the windshield. It was a mess." Another person said, "Last year the road was lined on both sides with dead Evening Grosbeaks."

Halifax, Nova Scotia — Dear Mr. Wilson, I just found out today that you were responsible for placing a band on a female Evening Grosbeak that I found dead in northern New Brunswick this past summer. Thought you might be interested in knowing something about how this particular bird and many others of its kind met their ends at this location. The bird was found flattened (I could have mailed it to you.) on a gravel highway with about 350-400 other dead Evening Grosbeaks.

When it comes to avoiding speeding vehicles, this species does not possess the highway savvy of the American Robin - far from it. I myself ran over two of them, despite slowing down to 25 mph. As far as I can tell, the birds were after salt deposits left over from winter salting. Further compounding the problem was the fact that cars and logging trucks came over a blind crest at 50-60 mph and found themselves right in the middle of the birds on the road. The steepness of the hill no doubt had something to do with the extra salt that was no doubt spread on it.

Having found a band on a dead Evening Grosbeak beside the road once before, I set out to examine every dead bird in this locale (47°30'N 67°00'W). It took about two hours, and I was starting to get discouraged and ready to give up, when I found the band. All that was left was a leg, so I wasn't sure which sex it was. The temperature was about 92° F, and large logging trucks were roaring by, constantly engulfing me in choking clouds of dust and pebbles. I had to use a sharpened stick to pry most of the birds off the road. Many were torn in half, decapitated, etc.

I estimated they had been at this suicide routine for two weeks. A week later they had retired to the woods or tired of dying or their numbers in the immediate vicinity had been decimated. Oddly enough, whenever a bird was injured, its fellows would

return to feed around it, but ignoring its condition. In this way, many more were killed, because they stayed with a dying bird. I also saw two more banded birds (both females) among the live birds. These birds were on their breeding grounds, so thanks to you, the Atlas now knows where some of our Evening Grosbeaks wander to in the winter.

This grosbeak graveyard is not a new phenomenon, but the large numbers at one spot is notable. Usually, they are spread out along many miles of highway, such as White-winged Crossbills that died by the thousands in southeastern New Brunswick in the winter of 1988-89. I will be atlassing in northern New Brunswick again this summer, so I will check the original site again to see if this is a recurring problem.

Brian Dalzell
Atlas Coordinator
Nova Scotia Museum
1747 Summer Street
Halifax, Nova Scotia
B3H 3A6

Book Reviews

Ravens in Winter by Bernd Heinrich, 1989. Summit Books, New York, N.Y. 379 pp, illus. Price \$19.95 hard cover.

If you really want to learn more about ravens, their vocalizations, their winter activities, their displays, and activities around carcasses at non-breeding times of the year, then this is the book for you. The author spent four winters on this research in western Maine at the edge of Mount Blue State Park, in his Camp Kaflunk. He introduced carcasses in various areas that he could observe to see how the birds would react, and would they actively recruit other ravens to feed upon the carcasses, the inter-play between resident pairs, and the influx of juveniles during the winter months. The author also goes into details as to various calls, who makes them, and their meaning. He then goes into the technique of trapping, banding, and wing-flagging the birds. He also goes into depth into the available literature on ravens, and either justifies or refutes this literature. There is much original research in this book, collected under adverse conditions that most of us can only imagine. The author has a very pleasing style of writing with a bit of humor sprinkled throughout. I fee that any BBCer who reads this book will be completely captivated.

William L. Wylie

Canaan Valley by Norma Jean Venable, n.d. West Virginia University Extension Service, Morgantown. 32 pp., illus., Price \$6.00.

Canaan Valley, 32 square miles of high mountain terrain in West Virginia's Tucker County, contains the largest wetland in the southern Appalachians. The northern end of the valley, which contains most of the wetlands, is owned by a power company, while about 6000 acres in the southern end makes up Canaan Valley State Park. This book is about the history, climate, geology, and formation of the valley, the plant and animal communities, mammals, herps, and birds. Norma Venable also describes the recreational opportunities offered by the state park and provides trail maps and checklists of the park's plants, mammals, and birds. She also discusses briefly some of the valley's conservation problems, the controversy over the Allegheny Power System proposal for a pumped storage power generating plant in the north end of the valley and the proposal for a National Wildlife Refuge there. Also she briefly discusses the overpopulation of white-tailed deer in the park and the resulting damage to trees and shrubs, reduced cover and food for small animals, and the possible elimination of some wildflowers. This book is a nontechnical, popular treatment of the subject, suitable for young people and adults who need a comprehensive introduction to Canaan Valley. It would make a wonderful guide for visitors to the park.

Return of the Whooping Crane by Robin W. Doughty, 1989. University of Texas Press, Austin. 182 pp., illus., Price \$29.95.

Almost everyone is familiar with the story of the rescue of the Whooping Crane from the brink of extinction. From only 16 wild birds in 1941, the population that breeds in Canada's Wood Buffalo National Park, and winters at Aransas National

Wildlife Refuge, has increased to 146 birds this year. On the surface, this seems to be an amazing success. One might give a sigh of relief and think here is one endangered species that appears to be out of harms's way. However such thoughts are premature. The Whooping Crane is still very much imperiled. Robin Doughty retells the history of the Whooping Crane, its decline, and recovery, and shows us how precarious is this recovery. He discusses the possible threats to the Whooping Crane on its winter refuge from possible accidents on the Intercoastal Waterway, pollution, and erosion. Three thousand barges carrying 23 million tons of petrochemicals a year pass through the coastal Texas refuge each year. Doughty details efforts made in recent years to establish a new breeding population at Gray's Lake National Wildlife Refuge in Idaho, which would winter in New Mexico, and the failure of that effort and its causes. He tells the story in part by following the history of many individual Whooping Cranes banded at Wood Buffalo National Park or at Gray's Lake. The future of the species will remain doubtful until a second population is established. According to Doughty, the next effort may be an attempt to establish a nonmigratory flock, perhaps in Florida. Doughty also examines the protection of the Canadian-Aransas flock and captive breeding programs. All of this is told in elegant prose and illustrated with many beautiful color photographs. There is also an extensive bibliography. This attractive and informative book should be read by everyone interested in endangered species.

Albert R. Buckelew Jr., editor

PATRONIZE YOUR CLUB STORE

Ornithological Books for Sale

Birds of Pennsylvania by Merrill Wood	\$ 2.00
A Field Guide to Bird's Nests by Hal H. Harrison	\$13.00
Peterson Field Guide Series, 257 pps., 222 color photos of nests and eggs, 222 bird sketches. Info. on range, habitat, etc. for species East of Miss. R. H.H.H. is past president of the BBC and honorary member. Autographed.	
Field Guide to Western Bird's Nests by Hal H. Harrison	\$11.00
Birds of North America by Robbins, Bruun and Zimm. illus. by Arthur Singer. Popular field guide, excellent color illus., range maps, field marks. Autographed.	
	Softback \$ 8.75
	Hardback \$11.00
West Virginia Birds by George Hall	\$20.00
The High Alleghenies by J. Lawrence Smith	\$15.00
Dozen Birding Hotspots by George Harrison. Autographed	\$10.95
The Backyard Birdwatcher by George Harrison. Autographed	\$14.75
America's Favorite Backyard Birds by Kit and George Harrison	\$14.75
Amphibians and Reptiles in West Virginia by N. Bayard Green and Thomas K. Pauley	\$12.00
Add \$2.00 for postage per order.	
Bumper Tag - Beware of sudden stops bird watcher's car	\$1.00
Bumper Tag - BBC	\$1.00
BBC Shoulder Patch	\$1.50
BBC License Plate	\$2.00

REDSTART EDITORIAL POLICY

Original papers in the field of natural history are published in the Redstart. Papers are judged on the basis of their contributions to original data, ideas, or interpretations. Scientific accuracy is most important and to this end an Advisory Board, selected by the Editorial Staff, will review submitted papers. Papers should be typewritten, double spaced on one side of the paper only. Clarity and conciseness of presentation are very important.

BROOKS BIRD CLUB MEMBERSHIP

The Brooks Bird Club is a non-profit organization whose objective is to encourage the study and conservation of birds and other phases of natural history. Membership includes subscriptions to the REDSTART and MAILBAG and entitles one to all the privileges offered by the Club. Classes of membership are: Student, \$5.00; Individual, \$14.00; Family \$17.00; Sustaining, \$25.00; Life, \$200.00. Checks should be written payable to the Brooks Bird Club and mailed to 707 Warwood Avenue, Wheeling, West Virginia 26003.

1990 Calendar of Events The Brooks Bird Club, Inc.

Date	Activity	Place
January 1-31	BBC Membership Month - Mail to H.Q.	Wheeling, WV
February 1-28	Write article or observation for The Redstart or Mail Bag	Mail to editors
February 23-25	Mid-Winter Meeting - Jackson's Mill	Weston, WV
March 18	Seneca Lake Waterfowl Trip	Senecaville, OH
April 27-29	Old Hemlock Weekend - Preston Co. 4-H Camp	Brandonville, WV
May 5-13	Century Day Counts	All local groups
May 18 -20	Ottawa Wildlife Refuge Warbler Trip	Oak Harbor, OH
June 1-8	BBC FORAY - Cedar Lakes	Ripley, WV
June 13-17	Sortie - Seneca St. Forest	Pocahontas County, WV
July 5-8	Terra Alta Weekend	Terra Alta, WV
July 18-Aug. 1	Pacific Northwest Trip	Seattle, Washington
Aug. 15-Oct. 7	Operation Bird Banding - Dolly Sods	Red Creek, WV
Aug. 30-Sept. 3	Annual Labor Day Outing - Greenbrier Youth Camp	Anthony, WV
September 14-16	Hawk Counts	West Virginia mountains
October 12-14	Annual Meeting - Cedar Lakes	Ripley, WV
November 3	BBC Board of Directors Meeting	H.Q. Wheeling, WV
November 8-11	Eastern Shore Waterfowl Trip - contact Carl Slater	Eastern Shore
Dec. 15-Jan. 2	Christmas Bird Counts - mail to Leon Wilson	All local groups

BBC FORAYS

1990 — June 1 - 8 Cedar Lakes, Ripley, WV
1991 — June 13 - 22 Camp Kidd, Parsons, WV

SEASONAL FIELD AND BANDING NOTES DUE

March 15	June 15	September 15	December 15
MAIL: Field Notes to: James D. Phillips, 900 Reynolds Ave., Princeton, WV 24740			
Banding Notes to: Ralph K. Bell, R.D. 1, Box 229, Clarksville, Pa. 15322			

The dates for the 1990 BBC program were selected as most appropriate for our scheduled activity and place. Sometimes changes beyond our control might be necessary. When such is the case, notification will be made as soon as possible in the MAIL BAG.