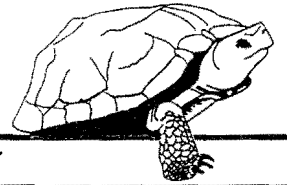


Cacapon



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BIRDS OF THE CACAPON RIVER

By George Constantz and Steve Fretwell

We started floating the Cacapon and counting its birds for two reasons. First, as part of the Lab's goal of assembling the River's baseline, we needed a comprehensive picture of the aquatic and riparian bird community. Because they depend on the River for food, protection, and nesting sites, these birds are useful indicators of the River's health. Our findings are serving double duty because we contribute them to West Virginia's statewide breeding bird census. And second, we hoped for some plain good fun! This article summarizes the scientific findings, while the next reminisces over the personal and emotional dividends.

On 27 and 28 May 1989, a total of eighteen people floated eight miles by canoe from Cold Stream (near Capon Bridge, WV) to the route 127 bridge (near Forks of Cacapon, WV), recording the number of individuals of each bird species found along the way. We put in at 7 a.m. and pulled out about 3 p.m. both days. Most birds were identified by song, although some were scored by appearance and behavior.

Table 1 on page 3 summarizes the findings of the Lab's 1st annual Cacapon River Bird Census Float Trip. Exact counts are stored in the Lab's data base.

We can evaluate the health of the Cacapon's riparian bird community by concentrating on two measures, (1) the number of species, and (2) the relative abundance of each species.

During the two days of field work we recorded a total of 58 different bird species. This number compares favorably with other healthy river riparian ecosystems. In contrast, the riparian bird community along a stressed river might only be half as species rich due to poisonous water or low food supply. In terms of the average number of individuals, we recorded 30 per hour afloat and 28 per mile of River. We were never out of sight or sound of birds. Only one individual of an exotic species (European starling) was seen.

Note that we have arbitrarily divided the species list into five abundance categories. The most common bird along the River was the red-eyed vireo, a species that is abundant throughout much of North America. The song sparrow, indigo bunting, scarlet tanager, and eastern phoebe were also very common. Eleven species such as the tufted titmouse, wood thrush, and American goldfinch were common. Fourteen species, all but one a migrant, were recorded 5-9 times. The northern cardinal, rufous-sided towhee, and ruffed grouse were not common, sighted only 2-4 times. Eleven species, such as the eastern bluebird, tree swallow, and yellow warbler, were recorded only once.

Only 9% of the species were very common (at least 20 sightings). Over half the species were recorded less than five times. This pattern of species diversity, characterized by a few common species and many less common ones, is typical of animal communities in nature.

Many of the bird species along the Cacapon are typical of mature undisturbed forests. For example, the presence of red-eyed and yellow-throated vireos, Acadian and great crested flycatchers, cerulean, worm-eating, and parula warblers, and the scarlet tanager, yellow-billed cuckoo, and Louisiana waterthrush all indicate that the Cacapon's riparian gallery is generally healthy.

Many Cacapon birds are neotropical migrants, species that breed in North America and overwinter in Latin America. Of the approximately 600 bird species that nest in North America, almost half overwinter south of the United States. For the Cacapon's bird community, the proportion seems to be slightly higher: Of the 58 species we recorded, 35 (60%) are migrants.

The table suggests that the more common a species is, the more likely that species is a migrant rather than a year-round resident. Specifically, a species recorded at least 20 times is twice as likely to be a migrant than one observed no more than four times. In terms of total number of individuals, about 80% of the Cacapon's birds are neotropical migrants.

Thus, through our birds, we have strong ties with Central and South America.

Conspicuous by their absence were two migrant species, the ovenbird and black-and-white warbler. We expected to hear several (e.g., the 5-9 category) of each. These missing species may be examples of what ornithologists have been warning us about for a decade, the continent-wide decline in the abundance of neotropical migrants. By coincidence, the current issue of The Nature Conservancy Magazine displays a black-and-white warbler on its cover, and its lead article identifies tropical deforestation as an important cause of this pervasive decline.

Like the acid rain problem, here is yet another reminder that the health of the Cacapon River is being affected by broader, even global, processes.

We will continue censusing the Cacapon's breeding birds at least through 1991 in order to arrive at average and variance measures, and hopefully for perpetuity as the Lab's annual rite of spring.

COUNTING BIRDS FROM CANOE

By Steve Fretwell

It was almost too good last year. So from the start let's agree to forego comparing the upcoming Float with 1989's. Fortunately, we didn't start the annual Cacapon River Bird Census Float Trip to have a good time, but to preserve some beauty and glory for our children. We were totally unprepared for what happened – the stretches of tranquility, adventurous rapids, friendships building, the perfect picnic. Not to mention the flashes of colored feathers sweeping into view, our silent canoes floating by deep groves, the haunting, numinous songs, and the eagle rising over a cliff.

For me personally, a highlight was finding my first Acadian flycatcher nest, cleverly camouflaged to mimic a ball of flood debris, complete with a clutch of three delicately patterned eggs. Like I said, it was almost too good.

But I repeat, that's not what we were there for. We were there to count the birds, part of the Lab's broader scientific effort to assemble the baseline of the River. We have to keep reminding ourselves: This is why we were there in 1989, and why we are going back to do it again.

(Continued on page 4)

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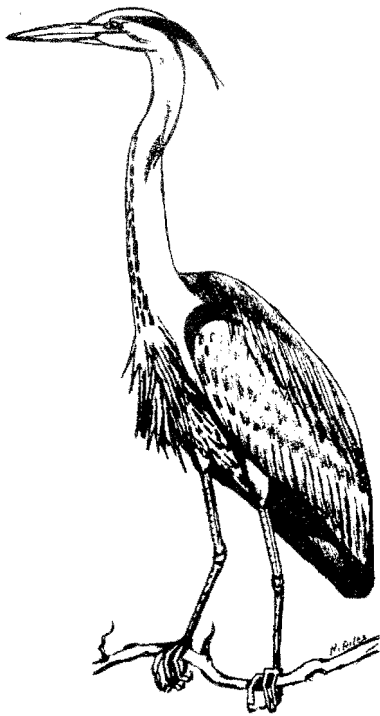
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Table 1. Relative abundance of riparian birds, Cacapon River between Cold Stream and the route 127 bridge, 27-28 May '89 (* = migrant)

Relative rank (1 = most common)	Species	Number of sightings
1	* red-eyed vireo	at least 20
2	song sparrow	
3	* indigo bunting	
4	* scarlet tanager	
5	* eastern phoebe	
6	tufted titmouse	10 - 19
7	* Acadian flycatcher	
8	* great crested flycatcher	
9	* wood pewee	
10	* chipping sparrow	
11	Carolina wren	
12	* wood thrush	
13	American crow	
14	* blue-gray gnatcatcher	
15	American goldfinch	
16	* turkey vulture	
17	* common grackle	5 - 9
18	cedar waxwing	
19	* yellow-billed cuckoo	
20	* northern oriole	
21	* spotted sandpiper	
22	* yellow-throated vireo	
23	* cerulean warbler	
24	* rough-winged swallow	
25	* worm-eating warbler	
26	* Louisiana water thrush	
27	* gray catbird	
28	* orchard oriole	
29	* American redstart	
30	* northern parula warbler	
31	northern cardinal	2 - 4
32	common flicker	
33	Canada goose	
34	white-breasted nuthatch	
35	* warbling vireo	
36	black-capped chickadee	
37	blue jay	
38	American robin	
39	rufous-sided towhee	
40	black vulture	
41	* pine warbler	
42	downy woodpecker	
43	pileated woodpecker	
44	* yellowthroat	
45	* brown-headed cowbird	
46	ruffed grouse	
47	*green heron	
48	eastern bluebird	1
49	bald eagle	
50	* ruby-throated hummingbird	
51	* eastern kingbird	
52	belted kingbird	
53	great horned owl	
54	European starling	
55	* tree swallow	
56	* veery	
57	* yellow warbler	
58	red-bellied woodpecker	

I can reflect on the Lab's '89 Float from a broader bird-counting perspective. I am grateful for my experiences on annual Christmas bird counts, a holiday ritual that has been conducted for 90 years and has censused birds all over the New World. I have participated in almost 50 myself, all different, all wonderful, and have statistically analyzed and published papers based on these data. Therefore, I know firsthand the scientific value of the Christmas bird counts. I see similar potential for the Lab's annual Bird Census Float Trip. As long as we remember why we are going.

As shown in the previous article, more than half of the bird species along the Cacapon are migrants, species that spend most of their lives elsewhere. Although we tend to think of them as "our" birds, the truth is that they are really our guests, visitors from Central or South America. As part of our motivation for protecting them, let us at least consider our responsibility to our southern neighbors. Shall their birds arrive here to find their guest room torn asunder?



Great Blue Heron

Pursuing migrant birds through their Central and South American home (wintering) grounds, I have discovered the deep diplomacy created by a common interest in our shared birds. When we care for their birds, they appreciate it and are encouraged to be a bit more considerate themselves.

And perish the thought, but what if ten years from now, that tireless bard of the canopy, the red-eyed vireo, should fail to arrive? Summers along the Cacapon would never be the same, whether you know anything about birds or not. No, we will have to do something, and more likely than not it will involve our southern neighbors. I hope it's more than apologize for past neglect. We hope it adds to our storehouse of friendships, of adventure. We hope it enlarges our hearts.

Shall we dip oars together, looking and listening, recording, as the River carries us along? Shall we learn anew the difference between what one can do alone, and what two or more can accomplish together? We can't promise what kind of time it will be, but we can promise that when you near the end of your life, and are gently turning over your past, the 1990 Cacapon River Bird Census Float Trip will be right up there with the precious memories that made your life worth living.

EXCERPTS FROM LETTERS RECEIVED AFTER THE 1989 CACAPON RIVER BIRD CENSUS FLOAT TRIP

"The canoe trip remains a highlight for me - especially as an introduction to identification of bird songs."

Terry Smith, Takoma Park, MD

"I've enclosed a poem I've been saving that reminded me of our incredible weekend with you. Wish you all well and thanks again for a memorable weekend!"

Judy Stone, Cumberland, MD

"We had great fun - really loved every minute of it and are still laughing. As Harold said, 'Even the dunkings were an adventure!'"

Shirley Parsons, Augusta, WV