WATER-DRIP VERSUS STILL WATER By John V. Dennis

The water-drip has sometimes been described as having a magical effect in attracting birds. A writer of a popular bird attracting guide gives the water-drip credit for bringing forty-five more species to his yard than he might have gotton otherwise. Merrill Wood (July-August 1954 <u>EBEA News</u>), in an experiment in taking birds in traps equipped with a drip versus ones without, found that the water-drip traps took about fifty percent more birds. However, in the following issue of <u>EBEA News</u>, Charles H. Blake discusses the data presented by Wood and concludes that the ratio in favor of dripping water should have been only twenty-five percent.

In my own experience some species are attracted to a water-drip, others are repelled, and still others appear to show no preference between a drip and a non-drip. This is something I had long noted in a general sort of way at the two bird baths outside the window of my home near Leesburg, Virginia. Frequently when I had a drip at one bath and not the other, I found that there were noticeable differences in numbers of birds coming and species composition between the two baths. It was my general impression that the non-drip attracted a somewhat greater volume of visitors but not as many species.

This is something that I have tested during a nine-month period beginning in September, 1965. Now, after recording the number of visits of each species to each bath during observation periods over several days each month, I have compiled enough data, I feel, to permit a few conclusions.

Efforts were made to eliminate possible sources of bias. The drip was alternated daily between the two baths which were four feet apart, without pedestals, and having approximately the same advantages in regard to perches and cover. However, not every visit of a bird could be construed as a choice between a drip and non-drip. When one bath was occupied, for example, a bird might go to the other simply because of the fact that it was unoccupied. Or again a bird might have gotton in the habit of always going to the same bath and continue to do so regardless of the drip situation.

In spite of considerations such as these, I felt that there was enough of an element of choice between drip and non-drip to produce meaningful results. The table gives the total number of visits of each species as recorded during observation periods extending from September 5, 1965, to May 23, 1966. Observations were conducted on sixty-six days during this period and during every month except April. No set interval of time or schedule was established in making observations. Timing was dictated primarily by factors of convenience.

Т	otal No. vis	its To drip	To non-drip
Tina Chickadee	602	326	276
	450	116	334
	331	179	152
White-throated Sparrow	182	81	101
	1 30	75	55
white-breasted Nuthatch	110	41	69
	82	25	57
Cardinal Slate-colored Junco	50	19	31
Downy Woodpecker	39	19	20
Downy woodpeener	24	ló	14
Hue Jay Red-breasted Nuthatch	21	7	14
Red-breasted Natinaten	19	13	6
Catbird	19	10	9
Mockingbird	17	10	2
American Goldfinch	12	6	76
Brown Creeper	12	9	2
Magnolia Warbler	10	10	
American Redstart	10		- 5 3 3
Red-bellied Woodpecker		5 4	2
starling	7	4	2
Carolina Wren	7)
Ruby-crowned Kinglet	4 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4 3 3 2	=
Golden-crowned Kinglet	3	2	-
Rufous-sided Towhee	3	2	-
Wilson's Warbler	3	3	1
Blackpoll Warbler	3		
Indigo Bunting	3	1	2
Robin	3	1	2
Bay-breasted Warbler	2		2
Evening Grosbeak	2	-	2
Red-eyed Vireo		1	1
Black-throated Blue Way	rbler 2	l	l
Brown-headed Cowbird	2	2	-
Canada Warbler	2	2	-
Yellowthroat	2	2	
Yellow Warbler	1	-	1
Cape May Warbler	1	-	1
Yellow-bellied Sapsucke	er l	1	-
Myrtle Warbler	1	l	-
Parula Warbler	1	1	-
Chestnut-sided Warbler	1	1	-
Black-and-white Warble:	r 1	1	-
Scarlet Tanager	1	l	-
Yellow-shafted Flicker	1	<u> 1</u>	
Totals	21.78	1001	1177

Forty-three species came to the bird baths during observation periods. Twenty-four species came to both drip and non-drip baths, fifteen to drip only, and four to non-drip only. Thus with thirty-nine species coming to the drip and twenty-eight to the non-drip, there is a definite advantage in using a drip is one is seeking variety. In terms of number of individual visits the totals slightly favor the non-drip-1177 using non-drip versus 1001 using the drip. However, this edge is lost if the House Sparrow is deleted from the list. Without the House Sparrow the non-drip accounted for 843 visits while the drip accounted for 885 visits.

With a total of 334 visits to the drip and only 116 to the non-drip, the House Sparrow furnishes the most striking example of a species that tends to shy away from dripping water. On many occasions House Sparrows were seen to alight at the edge of the drip, but apparently becoming distrubed by the splash of dripping water (several drops per second), they invariably moved on to the non-drip.

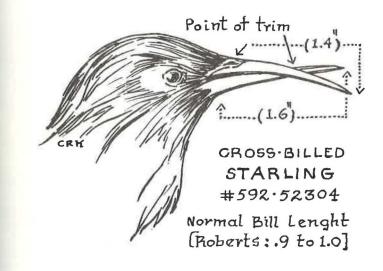
Seventy-four percent of the House Sparrows, seventy percent of the Red-breasted Nuthatches, sixty-nine percent of the Cardinals, sixty-three percent of the White-breasted Nuthatches, and sixty-two percent of the Slate-colored Juncos used the non-drip. These percentages are probably large enough to indicate that the five species were frequently enough disturbed by the drip to go to the non-drip instead. The White-throated Sparrow and Elue Jay seemed to show a slight tendency to favor the non-drip over the drip.

Only warblers, all of them transients, and the Catbird, seem to show any strong preference for the drip. Of nineteen Catbird visits sixty-eight percent were to the drip bath. Fifty-seven percent of the Chipping Sparrows, fifty-four percent of the Chickadees, and fifty-four percent of the Tufted Titmice used the drip. Whether these last three species are a little more inclined to go to the drip over the non-drip, it is difficult to say on the basis of these percentages.

Except for supplying a little more variety, especially in the way of migrant warblers, and doing a fairly efficient job of repelling House Sparrows, the drip has so far yielded few tangible results. I have failed to note the magical effect that some writers tell of. It is true that warblers are apt to be attracted by a drip while ignoring still water. But I feel that this is because the drip helps them recognize a source of water. Without such clues as the patter of dripping water or the sight of other birds bathing, the passing migrant is likely to go by without seeing or knowing of the existence of a place to drink or bathe. Even after coming down to the edge of a bird bath migrant warblers are often very hesitant about utilizing the water. Sometimes they fly away several times before accepting the bath. Indeed, a number of times I have seen a warbler leave a bath without utilizing it and not come back. Whether this is timidity about depth of water or other possible hazards or failure to recognize water as such, I do not know.

In any event, my observations lead me to believe that a water-drip, if anything, makes the bath less attractive to the majority of common visitors. If there is a time to use a drip, I would advise the periods in spring and fall when large numbers of migrants are passing through. then it is an advertisement, so to speak, to let birds know that water is present.

80% 389, Leesburg, Virginia.



CROSSBILLED STARLING By Constance R. Katholi

Starling #592-52304, a well-fed, glossy male, suffers from a truly monstrous deformity: the bird is crossbilled! (See Diagram.) The mandibles which are nearly half an inch longer than normal are crossed at half their length. Investigation revealed the underlying problem to be a dislocated jaw. Normal wear which keeps the bill under control does not function in this instance. I could not resist giving the bill a "trim," cutting it so that the "new" tips rested together. Obviously this is only a temporary correction; the mandibles will grow again. There was actually no evidence of feeding problems or undernourishment with the deformity; nor, for that matter <u>after</u> the "operation." Ten days later the bird was in the net again, still vigorous and scrappy, None-the-worse, -- if no better, -- for the experiment.

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