

SOME RETURNS OF BLACKBIRDS AND STARLINGS

By H.E. Burt

We have been operating a decoy trap on the University Farm in Columbus, Ohio since 1963 and, prior to that, some "back-yard" traps a half mile distant. The catch has been primarily Brown-headed Cowbirds (*Molothrus ater*), Common Grackles (*Quiscalus quiscula*), Red-winged Blackbirds (*Agelaius phoeniceus*) and Starlings (*Sturnus vulgaris*). Data have been presented elsewhere (Burt and Giltz 1969, Burt and Giltz 1970) on the comparative tendency of the four species to return to the trap (after 90 days). The majority of the returns are in the year when the birds are banded or in the first subsequent year. It seems worthwhile to analyze the cases of return after longer intervals.

Table 1 includes birds that returned four or more years after banding. The column headings are self explanatory. The age is given in years and months. There are 27 birds in this older category. This is not too impressive in comparison with the 119,094 birds banded in the nine year period 1964-1972 and the roughly 1000 birds that returned after 90 or more days. These long-lived birds obviously are at the far end of the distribution. But it is profitable to approximate the limits of the distributions.

Especial note should be taken of the first entry in the table-- a Cowbird that lived at least 9 years and 1 month. This may be a "record". According to the compilation in EBBA News for February 1973 the oldest Cowbird noted previously was aged 7 years 10 months. Another of our Cowbirds lived 7 years and so did one Grackle. Our oldest Red-wing was 6 years.

These figures are, of course, conservative. For instance, the first Cowbird in the table must have hatched several months before his October banding and may even have been hatched the preceding year so he lived almost certainly $9\frac{1}{2}$ years and quite possibly $10\frac{1}{2}$.

The four species evidently differ in the tendency to have long-lived members. The first column of Table 2 indicates the number of each species that appears in Table 1, i.e. the number returning after four or more years. Obviously old Cowbirds and Grackles predominate. A larger table (not shown) analyzed all the returns after two or more years. The results of this tabulation appear in the second column. For example 50 Cowbirds returned after two or more years as against 10 returning after four or more years. The two-year group yields a larger sample and perhaps is a more reliable indicator of species differences in this tendency to return.

The Grackles obviously have the largest number of "old" birds and the Starlings the least. However, these figures should be considered with reference to the number of birds available to return, i.e. the number banded. The third column gives the number of each species banded in the nine year period. Now the trend is clearer. The Grackles with the smallest number banded have the largest number of oldsters, while the Starlings with the largest number banded have the smallest number of oldsters.

To show the tendency still more clearly the figures in the second column are reduced to percents of the total 173 and these percents appear in the fourth column. Similarly the numbers banded are reduced to percents which appear in the last column. Now we can note that only 11% of the banded birds are Grackles but that 48% of the birds returning after two years are Grackles. On the other hand 32% of the banded birds are Starlings but only 5% of the birds returning after two years are Starlings.

Another variable may be involved to some extent in these results, viz. species differences in the tendency to return to the trap regardless of age. We have discussed elsewhere (Burt and Giltz 1970) an attachment to or orientation toward a particular place, such as a trap area, on the part of Grackles. This is termed topophilia. It was noted that Grackles do proportionately more repeating (less than 90 days) than do the other species. Also some 70% of Grackle recoveries are local, i.e. within the city limits of Columbus, whereas for Red-wings and Starlings the figure is around 30% and for Cowbirds even less. The present data provide still further evidence of Grackle topophilia. However, the apparent difference in longevity shown in Table 2 are so pronounced that it is very doubtful if they are invalidated by this variable.

References

- Burt, H.E. and M.L. Giltz. 1969. Analysis of 958 Blackbird Recoveries. Wheaton Club Bulletin, vol 14, pp. 1-9
- Burt, H.E. and M.L. Giltz. 1970. Topophilia in Grackles. Inland Bird Banding News, vol. 42, pp. 203-205

TABLE 1
Returns After Four Years or More

		Band number	Date banded	Date returned	Age-- years/months
Cowbird	♂	65-123180	10-13-63	11-3-72	9/1
"	♂	65-123240	10-15-63	3-23-71	7/5
"	♂	65-125328	10-28-63	7-29-68	4/9
"	♂	66-101715	7-31-64	8-3-69	5/0
"	♂	66-104430	9-28-64	11-12-68	4/2
"	♂	68-161472	8-10-68	10-11-72	4/2
"	♂	68-178351	8-26-65	10-25-70	5/2
"	♂	68-178736	10-17-65	10-5-70	5/0
"	♂	70-150789	5-23-66	10-14-70	4/5
"	♂	70-151247	10-31-66	7-15-72	5/9
Grackle		683-88946	5-1-63	6-6-67	4/1
"		773-55283	6-21-65	7-11-70	5/1
"		773-97457	8-9-65	5-7-70	4/9
"		773-97483	8-22-65	5-8-72	7/9
"		773-97822	5-13-66	10-17-70	4/5
"		773-99796	5-23-67	6-19-71	4/1
"		843-23743	6-6-68	3-9-73	4/9
"		843-23760	6-7-68	6-4-72	4/0
"		843-24047	6-23-68	7-9-72	4/1
Red-wing	♂	602-49874	7-5-62	7-27-68	6/0
"	♂	652-61786	4-4-64	4-21-68	4/0
"	♂	652-61956	5-14-64	7-24-68	4/2
"	♂	same bird	"	5-1-69	5/0
"	♂	682-67046	4-20-68	5-6-72	4/1
"	♂	682-87531	8-2-65	11-13-69	4/3
Starling		682-75323	6-21-65	11-19-70	5/5
"		732-64060	7-7-68	12-1-72	4/5
"		732-64242	7-10-68	12-6-72	4/5

TABLE 2

	<u>No. returning after 4 years</u>	<u>No. returning after 2 years</u>	<u>No. banded</u>	<u>% return- ing after 2 years</u>	<u>% banded</u>
Cowbird	10	50	36,702	29	31
Grackle	9	83	12,977	48	11
Red-wing	5	31	31,409	18	25
Starling	3	9	38,006	5	32
	<u>27</u>	<u>173</u>	<u>119,094</u>		

Returns After 2 Years or More

<u>Species</u>	<u>Band</u>	<u>Banded</u>	<u>Returned</u>	<u>Age</u>
Cowbird	♂ 65-123088	10-11-63	10-20-65	2/0
"	♂ 65-123180	10-13-63	11-3-72	9/1
"	♂ 65-123240	10-15-63	3-23-71	7/5
"	♂ 65-125328	10-28-63	7-29-68	4/9
"	♂ 66-101440	6-4-64	5-28-68	3/11
"	♂ 66-101443	7-5-64	7-14-66	2/0
immature				
Cowbird	♂ 66-101715	7-31-64	8-3-69	5/0
"	♂ 66-101741	8-1-64	8-24-64	2/0
"	♂ 66-104430	9-28-64	11-12-68	4/2
"	♀ 68-161008	5-7-68	4-30-71	2/11
"	♂ 68-161432	7-31-68	7-8-72	3/11
"	♂ 68-161465	8-10-68	10-10-70	2/2
"	♂ 68-161472	8-10-68	10-11-72	4/2
"	♂ 68-161820	11-1-68	11-16-70	2/0
"	♂ 68-162870	11-5-68	4-10-71	2/5
"	♂ 68-170956	7-7-65	5-13-68	2/10
"	♂ 68-176975	7-22-65	8-3-67	2/1
"	♀ 68-177005	7-22-65	4-29-68	2/9
"	♂ 68-178351	8-26-65	10-25-70	5/2
"	♂ 68-178736	10-17-65	10-5-70	5/0
"	♂ 70-150676	4-6-66	5-29-69	3/1
"	♂ 70-150771	4-27-66	7-21-69	3/3
"	♂ 70-150789	5-23-66	10-14-70	4/5
"	♂ 70-151144	10-17-66	8-3-69	2/10
"	♂ 70-151247	10-31-66	7-15-72	5/9
"	♂ 70-151686	4-3-67	11-29-70	3/7
"	♂ 70-151722	6-29-67	4-30-71	3/10
"	♂ 70-151761	7-4-67	4-6-71	3/9

<u>Species</u>	<u>Band</u>	<u>Banded</u>	<u>Returned</u>	<u>Age</u>
Cowbird	♂ 70-151805	7-7-67	7-19-70	3/0
"	♂ 70-194435	3-17-69	10-21-72	3/7
"	♂ 70-194628	3-25-69	3-31-72	3/0
"	♂ 70-194714	3-27-69	7-29-72	3/4
"	♂ 70-194740	3-27-69	4-12-72	3/1
"	♂ 70-194758	3-27-69	10-7-72	3/7
"	♂ 70-193770	1-29-69	1-2-71	2/0
"	♂ 70-194533	3-23-67	7-14-70	3/4
"	♂ 72-101117	5-15-69	4-6-72	2/11
"	♂ 72-101588	7-21-69	10-28-72	3/3
"	♂ 72-101701	7-24-69	11-8-72	3/4
"	♂ 72-101879	7-27-69	7-25-71	2/0
"	♂ 72-102027	8-3-69	7-30-72	2/11
"	♀ 72-102171	8-5-69	10-8-72	3/2
"	♂ 72-102279	8-11-69	7-7-72	2/11
"	♂ 72-103943	10-20-69	3-16-72	2/5
"	♂ 72-107058	4-30-70	7-3-72	2/3
"	♂ 72-107521	7-13-70	9-9-72	2/2
"	♂ 72-180079	7-25-70	8-12-72	2/1
"	♂ 72-108083	7-25-70	7-30-72	2/0
"	♂ 72-108318	9-19-70	9-3-72	2/0
"	♂ 72-127474	10-23-70	10-28-72	2/0

Returns After 2 Years or More

<u>Species</u>	<u>Band</u>	<u>Banded</u>	<u>Returned</u>	<u>Age</u>
Grackle	543-52858	4-23-56	4-24-59	3/0
"	543-52879	5-3-57	5-19-59	2/0
"	543-52898	5-3-57	6-2-59	2/1
"	583-20625	4-2-58	5-24-60	2/1
"	583-20700	5-6-60	5-16-63	3/0
"	583-20705	5-24-60	5-30-62	2/0
"	583-20713	6-18-60	5-16-63	2/11
"	583-20775	5-30-62	6-22-65	3/1
"	683-88946	5-1-63	6-6-67	4/1
"	743-94837	5-21-64	10-25-66	2/5
"	743-94842	5-21-64	6-20-66	2/1
"	773-55283	6-21-65	6-9-67	2/1
"	Same Bird	"	7-11-70	5/1
"	773-55287	6-21-65	6-23-68	3/0
"	773-55299	6-21-65	7-12-68	3/1
"	773-55317	6-21-65	6-24-68	3/0
"	773-55376	6-24-65	6-9-67	2/0

Species	Band	Banded	Returned	Age
Grackle	773-97057	7-2-65	3-18-69	3/8
"	773-97457	8-9-65	6-25-68	2/10
"	Same Bird	"	5-7-70	4/9
"	773-97483	8-22-65	5-8-72	6/9
"	773-97720	5-12-66	6-13-69	3/1
"	773-97782	5-9-66	6-3-69	3/1
"	773-97801	5-10-66	6-23-68	2/1
"	773-97822	5-13-66	10-17-70	4/5
"	773-97827	5-13-66	6-13-69	3/1
"	773-97884	5-23-66	4-29-69	2/11
"	773-97927	6-6-66	6-16-69	3/0
"	773-97930	6-6-66	6-24-68	2/0
"	773-97935	6-6-66	6-17-69	3/0
"	773-99016	6-22-66	7-7-68	2/1
"	773-99027	6-22-66	6-4-68	2/0
"	773-99147	7-11-66	3-28-69	2/8
"	773-99157	7-13-66	6-24-69	2/11
"	773-99221	8-15-66	5-7-70	3/9
"	773-99356	9-21-66	7-6-69	2/10
"	773-99622	4-29-67	6-10-70	3/2
"	773-99624	4-29-67	5-24-69	2/1
"	773-99645	5-2-67	5-22-69	2/0
"	773-99726	5-14-67	6-4-70	3/1
"	773-99729	5-15-67	6-22-69	2/1
"	773-99760	5-16-67	6-9-69	2/1
"	773-99796	5-23-67	6-19-71	4/1
"	773-99819	6-2-67	6-18-69	2/0
"	773-99827	6-7-67	6-9-69	2/0
"	773-99841	6-7-67	6-9-69	2/0
"	773-99875	6-26-67	6-9-69	2/0
"	773-99883	6-26-67	7-16-69	2/1
"	773-99990	7-10-67	5-22-70	2/10
"	Same Bird	"	6-29-71	3/11
"	843-22641	6-20-69	6-2-71	2/0
"	843-22819	6-9-69	6-13-71	2/0
"	843-22820	6-9-69	6-15-71	2/0
"	843-22943	6-16-69	7-2-72	3/1
"	843-23502	7-12-67	6-21-71	3/11
"	843-23598	4-24-68	5-23-70	2/1
"	843-23612	4-24-68	6-23-71	3/2
"	843-23627	5-5-68	6-1-70	2/1
"	843-23634	5-7-68	7-24-70	2/2

Species	Band	Banded	Returned	Age
Grackle	843-23743	6-6-68	3-9-73	4/9
"	843-23760	6-7-68	6-4-72	4/0
"	843-23906	6-23-68	6-8-70	2/0
"	843-23907	6-23-68	6-12-70	2/0
"	843-23911	6-23-68	6-12-70	2/0
"	843-24047	6-23-68	7-9-72	4/1
"	843-24316	6-28-68	6-12-70	2/0
"	843-24346	6-29-68	7-18-72	4/1
"	843-24391	6-30-68	7-10-70	2/1
"	843-24482	7-2-68	5-8-72	3/10
"	873-31930	8-14-68	5-28-71	2/9
"	873-47306	4-12-69	6-20-72	3/2
"	873-47380	4-24-69	4-16-71	2/0
"	873-47503	5-2-69	6-24-72	3/1
"	873-47572	5-9-69	6-17-72	3/1
"	873-47619	5-12-69	4-30-72	2/11
"	873-47668	5-18-69	6-23-72	3/1
"	873-47737	5-24-69	6-27-72	3/1
"	873-47744	5-24-69	5-18-72	3/0
"	873-47847	6-2-69	6-2-72	3/0
"	873-48000	6-26-69	6-18-72	3/0
"	1113-36567	7-22-69	5-23-72	2/10
"	1113-37172	5-8-70	6-20-72	2/1
"	1113-37203	5-16-70	6-18-72	2/1
"	1113-37351	5-29-70	6-17-72	2/1
"	1113-37372	5-31-70	8-13-72	2/3
"	1113-37460	6-9-70	6-27-72	2/0
Red-wing ♂	682-66429	4-17-68	3-8-71	2/11
" ♂	602-49874	7-5-62	7-27-68	6/0
" ♂	652-61786	4-4-64	5-23-66	2/1
"	Same Bird	"	4-20-67	3/0
"	Same Bird	"	4-21-68	4/0
" ♂	652-61956	5-14-64	7-24-68	4/2
"	Same Bird	"	5-1-69	5/0
" ♂	682-66475	4-18-68	4-18-70	2/0
" ♂	662-85710	4-26-70	6-3-72	2/2
" ♂	662-85714	4-27-70	5-7-72	2/1
" ♂	682-67046	4-20-68	7-11-71	3/3
"	Same Bird	"	5-6-72	4/1
" ♂	682-67227	4-26-68	6-29-70	2/2
" ♂	682-87531	8-2-65	11-13-69	4/3

<u>Species</u>	<u>Band</u>	<u>Banded</u>	<u>Returned</u>	<u>Age</u>
Red-wing ♂	682-88423	8-23-65	10-17-68	3/2
" ♂	712-16235	10-19-65	8-4-69	3/10
" ♂	712-19250	4-28-66	9-10-68	2/5
" ♂	712-19479	7-1-66	5-4-70	3/10
" ♂	732-57565	5-7-68	7-31-70	2/2
" ♂	732-57611	5-9-68	5-2-70	2/0
" ♂	732-57828	5-26-68	4-24-71	2/11
" ♂	732-57835	5-27-68	5-1-70	2/0
"	Same Bird	"	4-28-71	2/11
" ♂	732-57946	6-5-68	9-30-70	2/3
" ♂	732-64458	7-12-68	7-16-70	2/0
" ♂	732-65253	7-17-68	4-29-71	2/9
" ♂	732-67552	10-11-68	10-18-70	2/0
" ♂	732-84318	3-13-69	5-8-72	3/2
" ♂	732-87782	5-17-69	5-26-71	2/0
" ♂	752-47046	5-31-70	5-10-72	2/0
" ♀	66-101853	8-17-64	5-4-68	3/9
" ♀	70-152102	4-18-68	4-30-71	3/0
" ♀	70-152562	4-26-68	8-9-71	3/4
" ♀	70-152973	4-30-68	5-7-70	2/1
" ♀	70-101021	5-5-69	5-26-72	3/0
" ♀	72-106823	4-25-70	4-17-72	2/0
Starling	662-63703	9-26-66	2-12-69	2/5
"	662-65230	7-21-64	1-12-67	2/6
"	682-75323	6-21-65	11-19-70	5/5
"	732-58465	7-1-68	1-16-71	2/6
"	732-64060	7-7-68	12-1-72	4/5
"	732-64222	7-10-68	7-22-70	2/0
"	732-64242	7-10-68	12-6-72	4/5
"	752-47530	7-2-70	2-27-73	2/7
"	752-47973	9-18-70	2-9-73	2/5