

COMMENTARY ON GRACKLES ANTING WITH MARIGOLD BLOSSOMS

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Jean Bancroft alerted me to the fact that Common Grackles had been noted anting with marigolds in Winnipeg in recent years. Nero and Hatch have given us a detailed account of this habit and a possible reason for the grackles indulging in this strange performance.³

In a chapter of *Beyond the bird feeder* devoted to anting, I drew upon the studies of Australian Alec Chisholm and students Doris Hauser and Eloise Potter who researched the subject in North Carolina over 10 years ago.

Chisholm, during the course of his studies on anting in birds, collected information on insecticidal plants that birds use in their nests.¹ He stated that House Sparrows in Australia mutilated a pyrethrum plant for three successive years in order to use the foliage in their nests. Other reputedly insecticidal plants used by birds in Australia for nesting purposes included lavender-cotton, thyme and common rue. I have added yarrow to this list on the basis of having seen House Sparrows use the aromatic foliage of this plant in nests built in birdhouses in Virginia.

I have suggested caution in interpreting the use of aromatic herbs by birds as a method of ridding their plumage or nests of parasites: "If they 'knew' that ants or their acids helped control these pests (a debatable point), they might be expected to be equally versed in using insecticidal plants on their plumage in the same way they use ants. Plant materials of various kinds are used by birds in anting, but none of them, so far as I am aware, have conspicuous insect-killing properties."³

The birds in Winnipeg were, however, anting with plants with insecticidal properties. The marigolds contain pyrethrum, a well known insecticide.⁴ Pyrethrum is the common name for the chrysanthemum (*C. coccineum*) which is the source of the insecticide pyrethrum.⁶ This is described as being the least toxic to man and animals of all the insecticides. The source is the flower heads, and not the foliage (as was used by the sparrows in their nests).

Numerous students of the subject have concluded that birds use ants and other substances to rid their plumage of parasites, but I doubt that it is the main reason. Chisholm was of the opinion that birds use acidulous substances for skin stimulus and "plumage cleansing" and states that these two uses may be interlocked with each other and also with the use by birds of sunlight, water, dust and smoke for the benefits of their bodies.¹

Similar, independent conclusions were reached by Hauser and Potter, who observed anting behaviour in their respective yards in North Carolina (they were acquainted only through correspondence). They concluded that anting in birds was closely related to the molt period and that it was a method of reducing skin irritation associated with feather loss and that, at the same time, it produced pleasurable sensations.

I would place more emphasis upon the pleasure motive; many observations note the excitement and enjoyment shown by birds when they go through these antics. A Red-browed Finch, kept as an aviary bird

in England, "appeared to go into an ecstatic trance" when exposed to ants and "lay on his back, feet pointing upward, in the middle of the ant-nest..." Robert Parsons of Winnipeg told of a grackle rubbing the petals of marigolds through his feather particularly those of the breast and wings — "Presently they were all doing this and began acting as if they were drunk, seemingly unable to balance as they swayed from side to side."⁴

Furthermore, house cats have been observed anting with obvious pleasure in Australia and there are several records of anting by squirrels in the United States. Christine Dunham of Chestertown, Maryland, reported to me the only example of which I am aware of anting by a cat outside of Australia. This animal, a 12-year-old altered black cat (believed to be half Siamese), was in the habit of turning over pieces of wood to search for ants. The cat would eat some of the ants it found and allow others to swarm over its nostrils and head. The animal evinced signs of obvious enjoyment.

It seems appropriate to mention the special attraction that yellow flowers have for birds. Darwin wrote of yellow primroses and other yellow flowers being cut off by birds and strewn on the ground. He suspected that Greenfinches (*Carduelis chloris*) were doing the damage and that they were seeking nectar in the blossoms.² Since then numerous accounts of birds attacking flowers have appeared. Yellow crocuses and primroses seem to suffer the most damage. A British gardener told me that House Sparrows commonly pecked the yellow buds in her crocuses but did not eat them.

I had not previously seen any references to birds damaging marigolds, but I have observed House Sparrows tearing apart marigold blossoms in England. On 1 October 1981 House Sparrows at Canterbury plucked yellow marigold blossoms and flew off with portions of the flowers in their bills.

The seeds in these blossoms were still green and presumably were not being used for food. This observation was followed by one 13 October of House Sparrows in Wembly (a suburb of London) tearing apart marigold blossoms in a residential yard.

About the same time a House Sparrow in Wembly was seen flying off with a cigarette butt in its bill. As with the marigold observations, I was unable to determine what use was being made of the object in question. It is known however, that tobacco is one of the substances that birds use in anting. Chisholm reported anting with lighted cigarettes by the Jay (*Garrulus glandarius*) and Magpie in Europe and the Blue Jay in North America.

The fact that grackles in Winnipeg have been found to ant with blossoms rich in pyrethrum does indicate a purposeful object in this behaviour. But I would suggest that further observations are needed. Do the birds indeed have parasites in their feathers? Recent studies show that birds are generally far freer of feather parasites during the molting season (when anting is at its height) than any other time of the year. Potter (pers. comm.) writes that feather mites fluctuate with the amount of lipid substance on the feather. "This substance and mites are at a low level during the molting season because newly emerged feathers have been oiled only a few times and mites have not had a chance to infest them."

In the extensive literature on anting, there are many reports of anting birds not having any parasites at all on their skin or feathers. For example, Margaret Nice and Joost Ter Pelkwyk wrote in 1940 of aviary Song Sparrows which had no parasites and which at the ages of 36 and 37 days applied ants and also sumac berries to their plumage.⁵

Although anting by grackles would not appear to be in the best interests of those who grow marigolds in Winnipeg, it should

bring joy to the hearts of bird watchers. Here is a golden opportunity to learn more about the poorly understood habit of anting in birds. Do birds ant because the substances they use pleasantly stimulate the skin and, in some instances, act as a counter-irritant, or does the habit have a more utilitarian purpose?

I am grateful to Jean Bancroft for keeping me informed about recent outbreaks of grackles anting with marigold blossoms.

¹ CHISHOLM, A.H. 1959 The history of anting. *Emu* 59:101-130

² DARWIN, C. 1874 Flowers of the primrose destroyed by birds. *Nature* 10:24

³ DENNIS, J.V. 1981 *Beyond the bird feeder*. Alfred A. Knopf, New York

⁴ NERO, R.W. and D.R.M. HATCH 1984 Common grackles anting with marigold flowers. *Blue Jay* 42(4):212-214

⁵ NICE, M. and J. TER PELKWKYK 1940 'Anting' by the Song Sparrow. *Auk* 57:520-522.

⁶ RODALE, J.I. (Ed.) 1959 *Encyclopedia of organic gardening*. Emmaus, Pa.

EDITOR'S NOTE: An article on anting "Anting antics," by Eloise F. Potter, just appeared in the summer issue of *The Living Bird* 4(3):12-15.

FIRST SAGE THRASHER SIGHTING IN MANITOBA

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The senior author has been studying Western Meadowlarks along the Assiniboine Diversion near its mouth at Lake Manitoba. On 10 June 1984, at 0530 h the authors were watching a meadowlark near the Peters' farmhouse about 10 km south of the lake, when an unusual bird was noted beneath the meadowlark.

At first glance, it was apparent that it was a rare bird. It was three-quarters the size of the meadowlark and slim, with upperparts and legs the color of dry modeling clay. The breast had many narrow streaks of that color. Otherwise, the breast was a dirty, pale, brownish-white. The tail was distinctly darker than the back, with white tips to the

outer feathers that became obvious when the bird flew. No obvious wingbars were seen. The most striking features were the yellow eye, moustaches bordering the throat, a short, slender and slightly decurved bill, pale toward the base, and the breast streaking.

After almost 3 minutes of observations the bird was identified as a Sage Thrasher. Having observed Crissal, Brown and California Thrashers in the wild, Horn was struck by this species' small size and short bill. The thrasher ran and paused in typical thrush fashion, but with the more horizontal posture and protruded head of a thrasher.