LONG-TAILED JAEGER IN ALBERTA by Ian R. Halladay, 1321 Cameron Ave. S.W., Calgary

On the 11th and 12th of June, 1966 some members of the Calgary Bird Club visited Cypress Hills Provincial Park in Alberta where we spent an enjoyable but somewhat damp weekend. While a variety of interesting birds was seen by the club's members during the week-end, the highlight of the trip was a Long-tailed Jaeger (Stercorarius longicaudus). The jaeger was first seen about 2:30 p.m. on June 12 at the east end of Elkwater Lake by Nora and Ian Halladay and shortly thereafter by Elizabeth and Derek Beecham. During the time the jaeger was observed it spent much of its time walking about on the edge of the highway from where it would take off for short flights along the lake margin before returning to the highway. A 35 mm. colour transparency was taken of the jaeger while it was sitting on the highway shoulder. The photograph shows the bird to be definitely a jaeger and with some magnification the long central tail feathers are discernible. Robert R. Taylor, who has observed this species on its nesting grounds, has confirmed the identification.

In the *Birds of Alberta* by Salt and Wilk, 2nd ed., 1966, the Long-tailed

FEEDING WEED SEEDS TO BIRDS

by J. F. Alex, Experimental Farm, Regina

Inquiries are often made as to the advisability of using weed seeds for bird feeding stations.

If certain precautions are observed, it can be safe to feed screenings containing some weed seeds to birds. The grinding action in the bird's crop or gizzard and subsequent digestion are usually sufficient to destroy nearly all but the very hardest seeds. Birds which eat weed seeds at such feeding stations are primarily seed-eating birds. Seeds are their food. It stands to reason that, in order for the birds to gain sustenance from the seeds they eat, the seeds have to be digested.

However, a certain proportion of seeds may escape crushing in the gizzard and be passed in the excreta. jaeger is listed as a rare migrant. There are five previous sight records given for Alberta: three occasions between 1932 and 1934 at Baptiste Lake; Lake Athabasca on June 13, 1933; and two near Edmonton on June 3, 1965. The present sighting is the sixth and apparently the first to be documented.

It is interesting to note that the records for which we have dates are in the period June 3 to 13. It would seem possible that in early June the Long-tailed Jaegers moving north in the Pacific Ocean have reached this latitude and some individuals may stray inland. At Kazan Lake in central Saskatchewan, one was closely observed by T. E. Randall on June 13, 1942 (Blue Jay, 20:60-72). On Lake Athabasca in Saskatchewan and therefore closer to the breeding grounds, R. W. Nero reports sight records for July 1, 1959 (one), and July 25, 1962 (two) (Birds of the Lake Athabasca region, Saskatchewan, 1963).

I am interested in further study of spring records of the three jaegers which occur in this region and would appreciate hearing from anyone who has such information for the Northern Great Plains area.

Viable seeds of wild mustard, stinkweed, knotweed, plantain, poppy and sheep's sorrel have been recovered from droppings of pigeons. Viable seeds of lamb's quarters, shepherd's purse, groundsel, chickweed, corn spurrey and narrowleaved plantain have been recovered from droppings of sparrows. Other weeds whose seeds have, at least sometimes, passed unharmed through the digestive tracts of birds include orache, common toadflax, gromwell, pale smartweed, creeping buttercup, dock, annual sowthistle, dandelion and field bindweed. The chief factors affecting the dispersal of weed seeds by birds are the palatability of the different seeds (the more palatable ones are likely to be more completely digested) and the availability of the different seeds (when the supply of seed is plentiful, the proportion of uninjured seeds passing through the bird increases). Birds eating weed seeds at a feeding station are therefore more likely to pass viable seeds in their droppings than birds which eat fewer weeds seeds in their normal search for food.

Birds are often selective in their feeding habits. If given elevator seed screenings, some species of birds may concentrate on eating the cracked grain and leave the weed seeds, some may take only a particular group (based on size, colour or shape) of weed seeds, and others may eat a little of everything — smorgasbord style.

Before feeding elevator seed screenings to birds, several points should be considered:

1. What weed seeds are in the grain? (a) If seeds of any of the prohibited noxious weeds (dodder, field bindweed, halogeton, hoary cress, horse nettle, leafy spurge, Russian knapweed, tansy ragwort and Tartary buckwheat) or toadflax or red bartsia are present, do not under any circumstances feed the screenings to birds. If even one of the above seeds escaped destruction in the bird and were dropped where it might start a new infestation that would be inexcusable.

(b) If primary noxious weed seeds (bladder campion, couchgrass, giant ragweed, ox-eye daisy, perennial sowthistle, white cockle, wild mustard, wild radish or yellow rocket) or other noxious weed seeds are present consider the abundance of these weeds in the district before feeding the screenings to birds. In general, however, if seeds of a particular weed are abundant in the screenings, chances are that that weed is also common in many if not most fields in the district and the few viable seeds which would be dispersed by the birds would not materially affect the overall weed growth. Occasionally one farm may be heavily infested with a weed which occurs nowhere else in the district. If seeds of that weed are present in one lot of screenings avoid using those screenings for bird feed and thereby avoid the risk of spreading that weed to uninfested farms.

(c) Some weed seeds may be toxic to birds. These include cocklebur, milkweed, wild tomato, vetches, purple cockle and possibly cow cockle. Ergot can also cause poisoning. Birds will not normally eat such items but if these are in abundance at a feeding station, the birds may eat lethal doses of them.

2. What birds will patronize the feeding stations?

Some tree- and brush-dwellers are not apt to venture far beyond the immediate park area. These would not likely be responsible for distributing weed seeds to any great distance from the park. Other birds may fly considerable distances in a normal day and these could be the ones responsible for wide dispersal of weed seeds.

3. Can the seeds be killed beforehand?

Weed seeds can be killed by heat. If the quantities of screenings used are not large, perhaps they could be baked in a hot oven before being set out at the feeding stations. Fumigating the screenings with methyl bromide or similar poisonous gases might destroy weed seed viability but since these fumes are dangerous to humans the work should not be attempted by an amateur.

4. Will there be a problem from the seeds that are not eaten?

At any feeding station there will always be a certain amount of scattering. If the weed seeds present in screenings are from such undesirables as stinging nettle, the ragweeds, or any poisonous plant, obviously to place those seeds in a bird feeding station would heighten the probability of those undesirable plants becoming established in the immediate area.

The above information will help you to decide, in consultation with your local seed Inspector, whether to use grain elevator screenings in your bird feeding stations and if so, whether some lots of screenings should either not be used or used only after being heated to kill all seeds present.