## ROSS' GULL AND THE ROLE OF THE VAGRANT

The following article by Noble S. Proctor is reprinted with permission of the publishers from Discovery (Peabody Mus., Yale Univ.) 10:2, 1975, pp. 81-89.

On March 3, 1975, I stood among a group of people at Salisbury, Massachusetts, scanning a windswept beach for a lone bird. Not just any bird but a Ross' Gull (<u>Rhodostethia rosea</u>). Normally it breeds in northern Siberia and spends the entire year within the Arctic Circle and, until the previous day, it had never been recorded in the contiguous 48 states. At 10:15 a.m. it appeared and everyone watched as it flew about, fed, and walked on the mud-flats. In the following weeks hundreds of people came to stare at this bird and add its name to their "life lists"--those records of all the birds sighted in the course of an individual birdwatcher's life.

In recent years there have been reports of sightings of this species in Scandinavia and in the British Isles and now a Ross' Gull had reached the United States. While viewing the bird I wondered about the biological role played by such vagrants. In the recent past I have viewed several of these distributional anomalies; such wanderings demonstrate the dynamic nature of bird distribution.

Vagrants can be grouped into three categories: 1) those individual birds that are far out of the range or region characteristic for their species; 2) those whose range extends to a nearby area and are therefore not far from their home range; and finally 3) those birds that are not strictly vagrants--that is, off their range--but which appear at an unusual time of year. Over the past years, viewing examples of each of these kinds has given me some insight into the importance of such atypical behavior.

It should be noted that to an ornithologist adding a species to one's life list is not sufficient in itself. Certainly it is interesting to see some of these species in the field, but the appearance of birds far from areas typically associated with them does little to establish the normal activities of the species. In addition, so much more could be learned if individual birds could be viewed close at hand. Looking at an individual with a pair of bincculars only permits the recognition of which species it is. But in the hand, viewing the condition of plumage, fat deposits, and more importantly the physical condition of the bird, one can often determine where it came from, how long it has been traveling, and the possible cause of its presence in the area.

Modifications by man in the ecological system have also led to the occurrence of out-ofseason vagrants. Statistics show that large cities have a moderating effect on winter temperatures. In listening to a weather report, it is not uncommon to note a city is seven to ten degrees warmer than the neighboring countryside. Megapolises such as the area extending from Washington, D.C., to Boston could then have an effect on extending time a species would normally stay during the colder months. Also, there are some 10 million birdwatchers in the United States spending thousands of dollars on bird seed. Birds that would normally migrate due to lack of food stay on and may appear in a locality well past the normal migration date. Feeder records in the northeastern United States show Evening Grosbeaks (<u>Hesperiphona vespertina</u>) staying till late May, Pine Siskins (<u>Spinus pinus</u>) remaining into late June and Northern Orioles (<u>Icterus galbula</u>) spending the entire winter.

Modifications in temperature and the provision of food by human beings may also help the second form of vagrant. Species slowly extend their range from a nearby area. The spread of numerous southern species exemplifies this point.

It wasn't long ago that a Mockingbird (<u>Mimus polyglottos</u>) was a rare sight in Connecticut. The same can be said for the Cardinal (<u>Cardinalis cardinalis</u>). Now they frequent every thicket and feeding station. Tufted Titmouse (<u>Parus bicolor</u>) have moved in over the last ten years and are now common. Red-bellied Woodpeckers (<u>Centurus carolinus</u>) have made inroads into the state's oak woods and now nest in several areas and are appearing at feeding stations. In the past Blue-gray Gnatcatchers (<u>Polioptila caerulea</u>) were rare in migration. At various times in May 1974 at East Rock Fark, New Haven, Connecticut, I recorded seeing 80 individuals of this species; they now nest throughout the state.

Several speculations can be made on the range extensions of species such as these. Temperature modifications could aid a more southern species. Such birds find a natural corridor running from Washington, D.C., to the New York area where this moderating factor occurs. Food availability would also be an aid. Note how many of these species with range extensions are the types attracted to feeding trays or live in close association with man. Another aspect is territoriality. In a population there are roaming unmated birds that serve the purpose of filling a niche if something happens to the present occupant. These birds are on the periphery of the range for a species and at times are forced to occupy a nontypical habitat. Some southern species are in this situation, at the northern limit of their ranges. If they are preadapted for successful occupation of such habitats and are aided by the aforementioned modifications, it might be possible for the species to extend its range northward.

Other environmental modifications by man and the introduction of alien species have had an affect on bird distribution. Old Christmas censuses of birds in Connecticut show that the Herring Gull (<u>Larus argentatus</u>) was rare in the winter and uncommon in the summer. However, with the establishment of open garbage dumping we have set the "dinner table" for the species and its numbers have soared.

Recently the winter concentrations of blackbirds in the southern states have attracted attention. The blackbirds were provided roosting sites in the form of pine plantations. Food was available in the nearby agricultural lands and the blackbirds took advantage of these two factors and took up residence in the pines. A simple solution to the problem would have been to remove the roosting sites and the birds would have dispersed.

Introduction of alien species has led to dramatic effects on bird populations. House Sparrows(<u>Passer domesticus</u>) and Starlings (<u>Sturnus vulgaris</u>) quickly adapted to man's habits and living areas and soon became a nuisance. They profited from man's means of waste disposal, finding food in dumps and alley ways. Plentiful roosting sites were available. Building ledges, bridges, etc. could also be used as nesting sites. Native species have suffered because of the adaptability of these vagrants. Notably the Eastern Bluebird (<u>Sialia sialis</u>) has been evicted from its nesting sites by the activities of Starlings.

Two recent introductions show both sides of the coin. House Finches (<u>Carpodacus mexicanus</u>) were introduced on Long Island in the early 1940s, having been released as illegally caged birds from the west. They have spread along the coastal areas of the east and are penetrating inland. They are colorful, have a pleasant song, and are aggressive enough to compete with the House Sparrow. In this case it appears we have a welcome addition to the avian fauna of the eastern states. In contrast we have the growing fame of the Monk Parakeet (<u>Myiopsitta monachus</u>)--a species from South America that was liberated in the New York area region in the late 1960s via accident during shipping and through direct release, since it was a glut on the pet market. A highly adaptive species, the cold of our winters does not affect it as it comes from colder climes in Patagonia. Two habits make it objectionable. Monk Parakeets build massive stick nests--one for roosting and one for egg laying. Construction of these involves snapping twigs from ornamental shrubber y surrounding houses. Lodging behind transformers on telephone poles can cause problems for power companies. Another bad habit is a taste for fruit. A group can'strip an apple or pear tree in no time; the agricultural impact is obvious. People have not helped in controlling the spread of this species. After seeing a parrot at a feeder, extra food is often put out, possibly helping the bird survive when normally it would not. Hence we are faced with a new problem that might be difficult to stop.

This brings us to the final type of vagrant--birds such as Ross' Gull, hundreds and even thousands of miles from their home range. The past few years have seen several representatives in Connecticut that belong to this category.

Individuals that fit this category (most of which go unnoticed) rarely establish themselves in a new area. Absence of suitable habitat and competition with species already present prevent such establishment. In addition, a mate is along way away! A trained ornithologist can recognize and evaluate the capability for establishment when a vagrant population arrives.

When the first Cattle Egrets (<u>Bubulcus ibis</u>) reached South America it was inevitable that they would spread as no species filled the niche of feeding on insects stirred up by the cattle, raised in many regions there. An opening for the Cattle Egrets was available and the population boomed.

The Glossy Ibis (<u>Plegadis falcinellus</u>) has slowly inched its way north and is now well established on the offshore islands of Connecticut. The proper nesting habitat and feeding areas were present and only needed to be exploited; this has happened over the last five years.

Recently a Manx Shearwater (Puffinus puffinus) was found breeding on Penikese Island.

off Martha's Vineyard, Massachusetts. Numerous sightings of this species during pelagic trips off the coast seemed to negate the possibility of all sightings being attributed to wanderers from Europe. Suitable breeding habitat, which is very limited here, was searched for and the species found. The population will be greatly restricted by the limitations of habitat.

The Little Gull (<u>Larus minutus</u>), another European species, has been recorded much too often to be attributed to wandering here from Europe. Condition of specimens suggested breeding nearby. Observation and exploration found a nesting colony in Quebec.

There were 37 sightings of Ruffs (<u>Philomachus pugnax</u>) along the east coast of the United States in the fall of 1974, seven in Connecticut. This number proves that this species is not the rarity it was thought to be. If one considers the luck involved in finding one Ruff in an area the size of coastal Connecticut it is not unbelievable that many individuals could be along the coast at any one time. In this context the Ruff is far from rare and the same can be shown with a number of other presumed rare species. The nesting area for the Ruff is listed as European, but the recent flood of sightings seems to indicate not all are European strays. If one of these birds could be examined closely, it might be possible to determine its breeding condition, plumage stage, and the degree of fat stored for migration. These clues might indicate a New World breeding colony for this species.

In most cases, however, a vagrant wanders completely off course never to see its native habitat again.

Several examples come to mind. A Spotted Redshank (<u>Tringa erythropus</u>) at New Haven Harbor, Connecticut, many miles from its breeding grounds in Siberia and wintering grounds in Africa had no chance of finding its way back. No habitat existed within 4,000 miles to duplicate its home range. It was doomed. A Wheatear (<u>Oenanthe oenanthe</u>) in Guilford, Connecticut, was far from its native haunts as was a Fieldfare (<u>Turdus pilaris</u>) that appeared in Larchmont, New York. Neither could be expected to find its way home. Inspection in the hand may have added some insight as to why each had gone astray.

It can be seen then that bird population studies are complex and dynamic. Many factors must be considered fully to understand the role played by vagrants to our shores. Unusual occurrences can generally be attributed to illness or injury, and population shifts to modification of the environment by man. Species such as the Fieldfare, Wheatear, and Ross' Gull are but lost individuals of the bird world. They are of special interest to the birdwatcher but ornithologically of little importance when all that is possible is a look at them through a telescope or a pair of binoculars.

The role of a vagrant can be manifold. However, a complete understanding of habitat, habits, condition of the bird, and other factors are needed to predict how important a role the species plays when it appears.



IVORY GULL, SALISBURY STATE BEACH, 4 JANUARY 1976 Photographed by Bruce A. Sorrie