LAUGHING GULLS (LARUS ATRICILLA) AND BLACK SKIMMERS (RYNCHOPS NIGRA) BROUGHT TO NEWFOUNDLAND BY HURRICANE

By Leslie M. Tuck*

Sea-birds from the West Indies and nearby subtropical regions occasionally occur in New England and the Maritime Provinces of Canada as a result of hurricanes. Peterson (1947) lists three species, the Sooty Tern (Sterna fuscata) and the Noddy (Anous stolidus) which breed at Dry Tortugas and the Yellow-billed Tropic-bird (Phaethon lepturus) which breeds in Bermuda, as examples of exotic sea-birds which are occasionally brought northeastwards by hurricanes. Up to the present time, not one of those three species has been recorded in Newfoundland.

Most storms originating in the West Indies which develop into hurricanes veer into the North Atlantic south of the Grand Banks before their effect is felt in Newfoundland. This may be the reason that few tropical sea-birds have been recorded in Newfoundland. According to Peters and Burleigh (1951) the only known occurrences in Newfoundland of exotic sea-birds are single examples of the Caribbean Frigate-bird (Fregata magnificens) and the Yellow-nosed Albatross (Diomedea chlororhynchos). In addition, a Bridled Tern (Sterna anaethus anaethus), No. 186176, in the Museum of Comparative Zoology, Harvard University, was collected at Cuslett

by J. C. Cahoon on January 21, 1891.

In 1958, a tropical storm, Hurricane Helene, the path of which is shown in Fig. 1, swept through Newfoundland and brought with it large numbers of Laughing Gulls (Larus atricilla) and Black Skimmers (Rynchops nigra), neither of which had been recorded previously in the region. Hurricane Helene was one of the most destructive storms of 1958. It developed in the Cape Verde Islands on September 16 and moved slowly on a west northwest course. On September 23, a large and very warm anticyclone in the upper troposphere, which had developed over Texas, moved rapidly eastward, reaching the middle Atlantic coast on the 25th. In response to the arrival of this anticyclone in the upper troposphere, Hurricane Helene veered to the left on a northwesterly course and deepened rapidly. The western edge of the hurricane eye came within 10 miles of the coast at Cape Fear, and a portion of the intense convective wall cloud passed over land in this area.

The hurricane force winds brought high tides and torrential rains on the Carolina coast. At Cape Fear, winds were estimated at 125 mph with gusts to 150 and 160. A radar photograph (Fig. 2) taken by the U. S. Coast Guard at Cape Hatteras, on the afternoon of September 27, showed that the eye of the hurricane was approximately 25 miles in diameter. Late that night, the hurricane recurved, moved northeastward at an accelerated rate, and crossed Newfoundland on the 29th. The full force of the storm was felt

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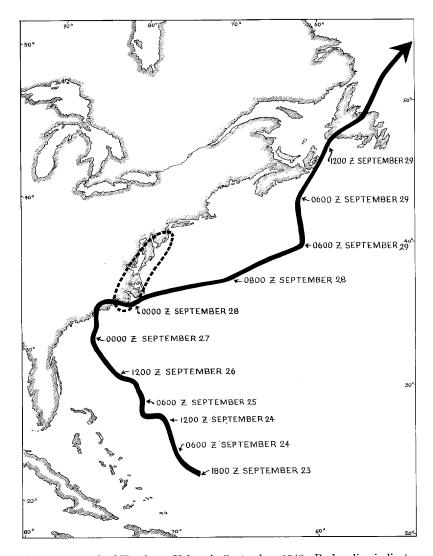


Figure 1. Track of Hurricane Helene in September, 1948. Broken line indicates the region where Laughing Gulls and Black Skimmers mentioned in this paper were banded.

at Burgeo, on the southwest coast of Newfoundland, at about 9:30 a.m. on the 29th. The winds were eastnortheast after the hurricane passed.

During the relatively calm period, as the eye of the hurricane passed through Burgeo, and before the direction of the winds shifted, a large number of strange sea-birds appeared. It was

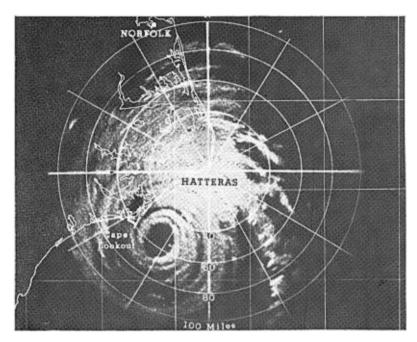


Figure 2. A radar view at Cape Hatteras of Hurricane Helene on the afternoon of September 27, 1958. The eye is a short distance southeast of Cape Lookout, North Carolina. Range markers are 20 miles. (Courtesy, Mariners Weather Log, U. S. Weather Bureau).

observed that some were wearing metal leg bands. Corporal R. S. Jarvis, Royal Canadian Mounted Police, was alert to this unusual event and immediately contacted me by radio. At my suggestion, he issued instructions that any birds found dead with bands on them were to be brought to him. He also made inquiries among captains of coastal vessels in the vicinity, and among big game hunters in the interior, on the extent of this unusual invasion of sea-birds. It was by this excellent on-the-spot investigation by Corporal Jarvis, and by the resulting recovery of 19 banded birds, that the effect on certain sea-birds of this particular hurricane was recorded.

LAUGHING GULLS

Laughing Gulls appeared at Burgeo at about 11 a.m. on September 29. It was estimated that at least 1,000 were present. About the same number were present at Burgeo on September 30, but now the birds appeared exhausted and unwary, and alighted in the lee of the houses (Fig. 3). On this date also, Laughing Gulls were recorded to the east and west of Burgeo. One banded Laughing Gull was shot at Rose Blanche, some 50 miles west of Burgeo, and another was shot three miles up Grey River.

Table 1. Recovery of Banded Sea-Birds in Newfoundland After Hurricane Helene, Listed by Date of Recovery.

Band No.	Species	Recovery and banding data
505-42542	Laughing Gull	Shot, Grey River, September 30, 1958; banded, Oister, Virginia, July 19, 1958.
515-41945	Laughing Gull	Shot, Rose Blanche, September 30, 1958; banded, Stone Harbor, New Jersey, June 28, 1957.
514-46438	Black Skimmer	Found dead, Trepassey, September 30, 1958; banded, Hog Island, Virginia, June 25, 1958.
514-98151	Black Skimmer	Shot, Placentia Bay, September 30, 1958; banded, Cape Lookout, North Carolina, July 2, 1958.
495-26342	Laughing Gull	Found dead, Burgeo, October 1, 1958; banded, Ocracoke Inlet, North Carolina, July 5, 1958.
545-07436	Laughing Gull	Caught by hand, Burgeo, October 1, 1958; banded, Stone Harbor, New Jersey, July 12, 1958.
535-27022	Laughing Gull	Found dead, Burgeo, October 1, 1958; banded, Stone Harbor, New Jersey, July 9, 1958.
514-46225	Black Skimmer	Shot, 100 miles west of St. John's, October 1, 1958; banded, Adams Island, Virginia, June 22, 1958.
606-14991	Herring Gull	Shot, Burgeo, October 1, 1958; banded, Long Island, New York, July 24, 1958.
576-12551	Herring Gull	Found dead, Burgeo, October 1, 1958; banded, Muskoka Lake, Ontario, June 22, 1957.
515-41811	Laughing Gull	Shot, Isle aux Morts, October 2, 1958; banded, Stone Harbor, New Jersey, June 28, 1957.
545-62801	Laughing Gull	Found dead, St. George's Bay, October 3, 1958; banded, Stone Harbor, New Jersey, July 17, 1957.
514-28195	Black Skimmer	Found dead, Brigus Junction, October 3, 1958; banded, Stone Harbor, New Jersey, July 13, 1957.
545-67725	Laughing Gull	Shot, Leading Tickles, Notre Dame Bay, October 7, 1958; banded, Stone Harbor, New Jersey, July 5, 1958.
495-26341	Laughing Gull	Shot, St. George's Bay, October 10, 1958; banded, Ocracoke, North Carolina, July 5, 1958.
545-67986	Laughing Gull	Found dead, Port au Port, October 15, 1958; banded, Stone Harbor, New Jersey, July 5, 1958.
545-62399	Laughing Gull	Found long dead, Port aux Basques, March 13, 1959; banded, Stone Harbor, New Jersey, July 17, 1957.

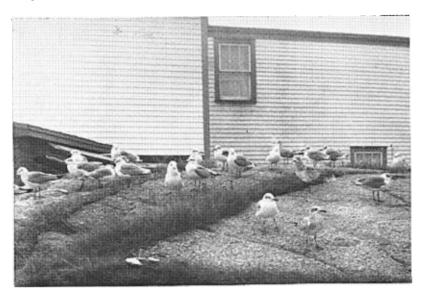




Figure 3. Laughing Gulls in lee of houses at Burgeo, Newfoundland, on September 30, after Hurricane Helene had passed. (Courtesy, Mr. Allan Matthews).

On October 1, fewer Laughing Gulls, about 600, were recorded at Burgeo. On the same day, one was caught by hand and the band removed, and 18, two of which were banded, were found dead at Burgeo. On October 2, a banded Laughing Gull was shot at

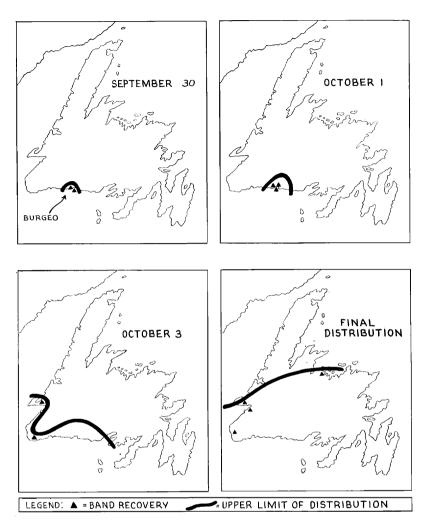


Figure 4. Dispersal and final distribution in Newfoundland of Laughing Gulls brought by Hurricane Helene.

Isle aux Morts and the captains of coastal vessels reported that these gulls were numerous from Hermitage Bay to Port aux Basques. On October 3, a banded Laughing Gull was found dead at Aquathuna, St. George's Bay, on the southwest coast and more reports of these gulls were received from the west coast.

According to the records of banded birds found dead (Table 1 and Fig. 4), Laughing Gulls were distributed as far north on the east coast as Notre Dame Bay by October 7. A banded Laughing Gull shot in St. George's Bay on October 10 proved to be the last

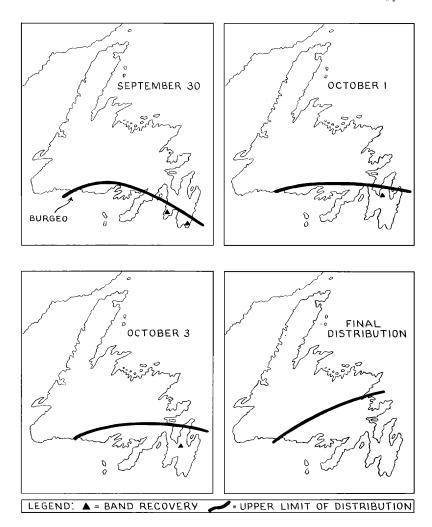


Figure 5. Dispersal and final distribution in Newfoundland of Black Skimmers brought by Hurricane Helene.

"live" record for Newfoundland. In June, 1959, we found the remains of about 20 on a small island in the Codroy River, on the west coast of Newfoundland. The banded Laughing Gulls recovered in Newfoundland after Hurricane Helene were from colonies in Virginia, North Carolina and New Jersey. Most of them had been banded as chicks during the previous summer, and were probably on a southward migration off Cape Hatteras when caught by the hurricane.

BLACK SKIMMERS

Black Skimmers were noted at Burgeo in small numbers on September 29. Nine were found dead at that locality during the next several days. On September 30, a banded Black Skimmer was shot at Angel's Cove, Placentia Bay, and another was found dead at Trepassey.

On October 1, six Black Skimmers were recorded at St. Alban's, Bay d'Espoir, and a banded Black Skimmer was shot at St. John's. Another was found dead on October 3, at Brigus Junction, some 50 miles from the coast. Two were found dead at Heart's Content on October 5, and one was found dead at Happy Adventure on October 6.

Unlike Laughing Gulls, no Black Skimmers were recorded west of Burgeo (Fig. 5). It will also be noted that after the hurricane passed through Burgeo, the winds were northnorthwest, and remained in this general direction for several days. Apparently, then, the eventual distribution of Black Skimmers in Newfoundland was influenced by the direction of the wind. Probably all soon perished. No observations of live Black Skimmers were reported after October 1, two days after the hurricane. Like the Laughing Gulls, the banded Black Skimmers recovered in Newfoundland after Hurricane Helene were from colonies in Virginia, North Carolina and New Jersey.

OTHER SPECIES

It is unlikely that the more familiar species of sea-birds, even if involved in Hurricane Helene, would be reported. Among the dead gulls sent to me by Corporal Jarvis from Burgeo were two Ring-billed Gulls (*Larus delawarensis*) which had perished on October 1. On October 1, also, two banded Herring Gulls (*Larus argentatus*) were found dead at Burgeo. One had been banded at Long Island, New York, and the other at Muskoka Lake, Ontario.

OTHER AREAS

A banded Laughing Gull, No. 515-62904, found dead on a Prince Edward Island highway on October 19, 1958, may have been one of the birds first brought to Newfoundland by the hurricane. It had been banded at Stone Harbor, New Jersey, on July 27, 1957. There was no evidence, so far as I can learn, of any influx of seabirds to the Maritime Provinces as a result of Hurricane Helene. Moreover, the track of the hurricane would have precluded any extensive influx other than post-hurricane wandering. It was different in Bermuda, however.

Although Hurricane Helene passed some 300 miles west of Bermuda, a good sample of terns from the tern-rich Carolina coast was evident at Bermuda on the early morning of September 29. Five species, Forster's Tern (Sterna forsteri), Cabot's Tern (Thalasseus sandvicensis), Common Tern (Sterna hirundo), Royal Tern (Thalasseus maximus) and Caspian Tern (Hydroprogne

caspia) were recorded at Bermuda on that date, two of which, Caspian Tern and Cabot's Tern, were new records for Bermuda. The most abundant was the Royal Tern of which 40 were observed and the least abundant was the Caspian of which four were observed. A few Black Skimmers and Laughing Gulls were also recorded at the same time.

ACKNOWLEDGEMENTS

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SUMMARY

An intense tropical storm, originating in the West Indies in the autumn of 1958, recurved northeastwards after approaching the coast of North Carolina, and crossed Newfoundland on September 29. A large number of sea-birds, mostly Laughing Gulls (Larus atricilla) and Black Skimmers (Rynchops nigra), were recorded along the south coast of Newfoundland during the relatively calm period as the eye of the hurricane passed through. During the next several days, 12 Laughing Gulls and four Black Skimmers, banded at colonies in North Carolina, Virginia and New Jersey were recovered. Herring Gulls (Larus argentatus) and Ring-billed Gulls (Larus delawarensis) were also associated with the hurricane. Subsequent movements of the hurricane-brought sea-birds were traced by band recoveries and reported observations. No live Black Skimmers were recorded in Newfoundland after October 1, or Laughing Gulls after October 10. This hurricane also brought Laughing Gulls, Black Skimmers and five species of terns to Bermuda.

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