

## Recent Literature

The extracts in this section are selected from a wide range of Journals from various sources covering subjects considered to be of interest to members. It is regretted that copies of papers cited are unavailable through the Association.—Hon. Editor.

### ANALYTICAL STUDIES

**Comparison of Birds from Pine Forests and Indigenous Vegetation.** Peter V. Driscoll. 1977. *Aust. Wildl. Res.* 4: 281-288.

Bird populations were assessed in native and exotic pine forests in late summer and winter. Results of the study indicate that in pine forests there is a reduction in species diversity and alteration in composition. This work complements that of Disney and Stokes 1976 *Emu* 76: 133-38.

**Locations of Recoveries of Black Swans, *Cygnus atratus* Latham, Banded at Lake Whangape and Lake Ellesmere, New Zealand.** Murray Williams. 1977. *Aust. Wildl. Res.* 4: 289-300.

Of 842 recoveries of Black Swans banded at Lake Whangape, North Island, New Zealand, 88% were from within 50 km of the Lake. A change in the ecology of Lake Ellesmere midway through the study period caused a change in the patterns of dispersal of these birds.

**Black Skimmer Breeding Ecology and Behaviour.** R. Michael Erwin. 1977. *Auk* 94: 709-717.

Black Skimmers *Rynchops niger* lay an average of 3.6 eggs per clutch. Despite a high hatching success (80%) the fledging rate is only 0.4 young per pair of adults.

**Colony Selection and Colony Site Tenacity in Ring-billed Gulls at a Stable Colony.** William E. Southern. 1977. *Auk* 94: 469-478.

Ring-billed Gulls *Larus delawarensis* showed weak tendency to return to their natal colony (19-33%) but a strong tendency to return to that at which they first bred (90%) of which 60% had nested for at least two years. Birds in less stable colonies exhibited greater variability.

**Effect of Cowbird Parasitism on American Goldfinch Nesting.** A. L. A. Middleton. 1977. *Auk* 94: 304-307.

Brown-headed Cowbirds *Molothrus ater* parasitised 9.4% of American Goldfinch *Clarduelis tristis* nests in a marked population. The clutch size, and number of chicks that hatched and fledged were smaller in parasitised nests than in unparasitised nests but percentage of hatching and fledging was higher.

**Reproductive Success of Ospreys in Central Chesapeake Bay.** Jan G. Reese. 1977. *Auk* 94: 202-221.

During the course of the study, 52% of the eggs found failed to hatch. Brood size averaged 1.9 per nest and mean fledging success was 1.8 per nest, amongst the best in the county but less than the average prior to 1947 (the pre-pesticide era). Egg shells of failed eggs averaged 11% thinner than in 1947.

**Adult Mortality and Fidelity to Mate and Nest Site in a Group of Marked Fulmars.** M. A. Macdonald. 1977. *Bird Study* 24: 165-168.

Observations on 96 colour-marked Fulmars *Fulmarus glacialis* indicated an annual adult mortality of under 2% and divorce rate of 4% per annum. Nest site fidelity was 80% per annum. Changes of site were generally associated with failure to raise young in that previous year but the new site was usually close to the old one.

**An Analysis of the Recoveries of British-ringed Fulmars.** M. A. Macdonald. 1977. *Bird Study* 24: 208-214.

After fledging Fulmars *Fulmarus glacialis* bred in Britain disperse to the western North Atlantic, Norwegian Sea, and European Arctic waters. In the fourth year, as breeding age approaches, the range contracts as birds become more restricted to land. Trapping and shooting those birds for food accounts for 32% of the recoveries. Most of those recovered are in their first year or in their fifth year or beyond.

**Bird Population Changes for the Years 1975-76.** L. A. Buttern and J. J. Marchant. 1977. *Bird Study* 24: 159-164.

Population changes in Britain as measured by the Common Birds Census for 1975-76 are presented and discussed in light of earlier studies for selected species.

**A Four-Year Census of Wading Birds on the Ribble Estuary, Lancashire/Merseyside.** Philip H. Smith and M. E. Greenhelgh. 1977. *Bird Study* 24: 208-214.

A four year survey of the Ribble Estuary gave overall mean population numbers of 111 000 birds in autumn, 83 000 in winter and 40 000 in spring. A total of 30 species was recorded and species accounts are given for the 11 most abundant species.

**Food Caching by Female American Kestrels in Winter.** Michael W. Callopy. 1977. *Condor* 79: 63-68.

Caching behaviour, including sites, prey species, storage and retrieval activities are described. American Kestrels *Falco sparverius* have about a 70% success rate in retrieving cached food demonstrating that this is an important temporary food storage method.

**Shorebird Food Habits in the Eastern Canadian Arctic.** Myron Charles Baker. 1977. *Condor* 79: 56-62.

Larger shorebirds were found to take larger prey items. On the basis of size and items available, larger birds are more selective than smaller species. Less separation between species' food size preferences was found than had been expected for the ten species studied.

**Paradise Shelduck.** M. J. Williams. 1976. *Wildlife—A Review* 7: 4-5.

A study of the breeding biology of the Paradise Shelduck found 4.5% of the pairs breed successfully, a mean clutch size of 9.6, and an average of 5.5 fledglings per pair. A total of 4 240 birds were banded, 763 recovered, and of those recovered 90% were taken within 65 km of their original handling site.

## TECHNIQUES

**Estimating Breeding Season Bird Densities from Transect Counts.** John T. Emlen. 1977. *Auk* 94: 455-468.

A method is proposed by which the number of birds recorded along a transect path can be used to estimate absolute density of birds in an area by using an index derived simultaneously for the site. The width of the transects are set for each species at the distance at which one detection (sightings, calls) starts to decline. Problems encountered, such as estimating distances, determining the index, choosing a rate of progress, etc. are discussed and the method illustrated with an example.

**A Simple Technique for Analysing Bird Transect Counts.** Martha Hatch Balph, L. Charles Stoddart, and David F. Balph. 1977. *Auk* 94: 606-607.

A simple method for transect counts in which lateral distances from the transect line are divided into intervals and the birds observed are placed into the appropriate interval in which they are recorded. Data are used to maximise the estimate of each species' density.

**Toe-Banding of Common Loon Chicks.** Judith W. McIntyre. 1977. *Bird-Banding* 48: 272.

Toe-banding was initiated for Common Loons *Gavia immer* because bands for adults proved too large for the easily caught chicks. Since loons do little walking, only small amounts of band wear occur and this method is recommended for other birds of similar locomotory habits grebes, frigatebirds, etc.

**Wing Marker for American Woodcock.** Ralph O. Morganweck and William H. Marshall. 1977. *Bird-Banding* 48: 224-227.

A method of using plastic wing markers for sex and age recognition of American Woodcock *Philohela minoris* is described. No loss of markers or damage to birds was recorded.

**Artificial Nest Burrows for Burrowing Owls.** Charles T. Collins and Ross E. Landry. 1977. *N.A. Bird Bander* 2: 151-154.

Burrowing Owls *Athene cunicularia* can dig their own nest burrows but more often utilize those excavated by other animals. They readily nested in artificial burrows constructed on wooden tunnels and nest chambers. Problems encountered and their solutions are discussed.

**Eye Colour Changes in the Dark-Eyed Junco and White-Throated Sparrow.** Robert P. Yunik. 1977. *N.A. Bird Bander* 2: 155-156.

Both species of finches exhibit eye colour changes, during their first year making this character useful in determining age.

## MISCELLANEOUS

**Aspects of the Biology of the Japanese Snipe *Gallinago hardwickii*.** H. J. Frith, F. H. J. Crome, and B. K. Brown. 1977. *Aust. J. Ecol.* 2: 341-368.

A detailed work presenting data on distribution patterns, timing route of migration, sex and age ratios, moult, and food of the Japanese Snipe in Australia. A comparison of habitat requirements in Australia and its breeding grounds in Japan are made. Its population in Australia is not secure due to habitat alteration.

**Resource Partitioning and Competition in Honeyeaters of the Genus *Meliphaga*.** H. A. Ford and D. C. Paton. 1976. *Aust. J. Ecol.* 1: 281-287.

A study of six species of *Meliphaga* (s. l.) honeyeaters showed them to differ in various important aspects of their ecology allowing sympatry in their range. Those with similar feeding habits differ in habitat while the others which sometimes share habitat with other species, differ in feeding ecology.

**Variation in Waterbird Numbers at Four Swamps on the Northern Tablelands of New South Wales.** S. V. Briggs. 1977. *Aust. Wildl. Res.* 4: 301-309.

Patterns of variation of waterbird populations from monthly counts are given and are explained in terms of rainfall patterns and habits of individual species.

**Behaviour of Ruddy Duck Broods in Utah.** David E. Joynei. 1977. *Auk* 94: 343-349.

Methods of communication between hen Ruddy Ducks *Oxyura jamaicensis* and brood are reported. Females defend the brood through visual displays and actual aggression. Males accompany the hen and brood through mate attraction rather than through a paternal relationship with the young.

**Breeding Biology of Five Species of Herons in Coastal Florida.** George R. Maxwell II, and Herbert W. Kale II. 1977. *Auk* 94: 689-700.

Nest site choice, nest building, egg laying, incubation, and hatching are described and compared for five species of North American herons occurring together on a small mangrove island. One species discussed, the Cattle Egret, occurs in Australia.

**Plumage and Molt in Shorebirds Summering at Enewetak Atoll.** Oscar W. Johnson. 1977. *Auk* 94: 222-230.

Five species of shorebirds were studied at Enewetak Atoll, Marshall Islands during early July. Aspects and patterns of their moult and plumage in these Pacific islands are reported. Most birds appeared to be first year.

**The Skuas of the North American Pacific Coast.** Pierre Devillers. 1977. *Auk* 94: 417-429.

The South Polar Skua *Catharcta maccormicki* is concluded to be the only large skua to occur along the North American Pacific coast. Its colour phases, juvenile plumage and annual cycle are discussed. Most birds visiting the Pacific coast are immatures. Evidence suggests a migratory path in the North Pacific takes a clockwise loop.

## Colour-marked Terns

I have received a report that six terns with green wings were sighted on Lizard Island, Queensland (90 km NNE of Cooktown) on 5 and 6 August 1977. The species of tern was not specified.

Does anyone know who may be marking terns in this way?

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