

me that my notes made at the time may be of interest. Since Mr. Whitley is my colleague and as I had seen his article before I made the flight, I paid particular attention to the extent of the destruction on the island. My notes are as follows:

About three-fifths of Mondrain Island is burnt out. Most of the unburnt portions are on the eastern side in the northern half of the island. The sparse vegetation on the extreme southern end has escaped the fire. There is a little strip of vegetation on the south-western end of the island which has not been burnt. The fire has swept to the water's edge down the gullies in the rock face in which vegetation occurs. There are patches of green vegetation on the western half of the island, also in the middle and in the northern part. The extreme northern tip is untouched.

It is very difficult to assess the extent of the area affected by fire, because some of the total area of the island comprises bare granite. Photographs might not serve to differentiate the green areas from the burnt ones.

There were no signs of re-growth in the blackened zone where the stark limbs of the burnt-out mallee could be seen. In some of the untouched areas what appeared to be yellow wattle was in bloom. I could observe no sign of how the fire started. I was able to inspect most of the islands in the Archipelago but I found no evidence of recent fires on any of them.

From his article referred to above and from conversations with him I know Mr. Whitley believed the fire on Mondrain to be unprecedented. According to his skipper (Mr. Arthur Douglas) "all attempts at burning off Mondrain Island had previously failed and not even kerosene could help to ignite the accumulated undergrowth there. The island and the adjacent mainland are uninhabited and outside the usual run of any transport."

I also am inclined to think that a fire on such a scale is a rarity in this area. Many of the islands have not been used for sheep pasture and, in fact, could not be. However, A. F. Basset Hull, in *The Emu*, vol. 21, 1922, p. 284, referring to his visit in November, 1921, says in respect of Mondrain Island: "So many times have fires been put through the scrub that only such persistent birds as the Mutton Birds could survive."—S. FOWLER, Perth, W.A., 11/10/44.

Reviews

Rejected Genera.—*American Museum Novitates*, no. 1269, Dec. 10, 1944, is 'Notes on Some Genera from the South-west Pacific,' by Ernst Mayr. The validity of several genera, mostly monotypic, being doubtful, the author undertook a revision resulting in the jettisoning of (*inter alia*) *Urodynamis* Salvadori, *Microdynamis* Salvadori, *Malacolestes* Mayr, *Myiolestes* Bonaparte, and *Meliphacator* Mathews. The two first, created for species of *Eudynamis* on slender differences such as colour pattern, absence of sexual dimorphism, and "small size and remarkable plumage coloration," can scarcely be justified from an analysis of generic characters.

Malacolestes was founded on wing shape, bill and "much softer plumage" (than *Myiolestes megarhynchus*). *Myiolestes* itself cannot be maintained as distinct from *Colluricincla*, and species of both the foregoing monotypic genera are to be included in the last-named.

Meliphacator was proposed by Mathews (without description) for *Ptilotis provocator*. There is no character justifying separation from *Meliphaga* and *Xanthotis*, and Mayr includes *provocator* in the latter.—C.E.B.

Wallace's Line.—'Wallace's Line in the Light of Recent Zoogeographic Studies,' by Ernst Mayr, *Qttly. Review of Biology*, vol. 19, no. 1, Mch. 1944, pp. 1-14, considers the border-line between the Australian and Oriental Regions in the light of modern knowledge. About 1890 doubts arose as to the absolute nature of the faunal break. Wallace based his hypothesis on scanty detail; later investigations brought to light additional evidence, establishing, for example, that the Celebes should be included in the Oriental Region.

An investigation of the Lesser Sunda islands fauna shows conclusively that Wallace's Line is not the border-line. It does, however, constitute a major break, brought about by geological factors connected with the extension of land masses on the Sunda shelf. The line separates, on the whole, a continental from an insular fauna. The numbers of western species halted by the various straits indicate the significance of Lombok Strait (with 68).

At the eastern end of the island chain there is, as would be expected, a corresponding separation—of Australo-Papuan areas from the islands with an Indo-Malayan influence. This agrees with the western edge of the Sahul shelf, and again separates a continental from an island zone. There is thus an intermediate area (though not sufficient to justify recognition as a zoogeographic sub-region—'Wallacea') carrying the true transitional line. The basis of this is Weber's Line, founded actually on non-zoological data, but establishing the true faunal balance, and, as modified, agreeing remarkably with the edge of the Australo-Papuan continental shelf. This separates the western islands with a predominant Indo-Malayan element from the eastern islands with an Australian Region representation.—C.E.B.

Reptiles or Birds?—In 'An Analysis of the Characters of *Archæopteryx* and *Archæornis*. Were They Reptiles or Birds?' *Ibis*, vol. 86, Oct. 1944, p. 517, Dr. P. R. Lowe claims that the creatures were arboreal climbing dinosaurs with the power to glide, representing the peak of the reptilian phylum and not the nadir of the avian phylum.

The imprints of wing feathers in the fossil matrix of the former show flimsy structures, the skull of the latter is marked by the absence of a bill and the presence of a snout with premaxillaries furnished with reptilian teeth. The author criticizes Heilmann's statement that the skull "is obviously on the way to become a bird's skull." The ribs of each are "not in the least bird-like"; there is no sternum, suggesting that it must have been cartilaginous, as in reptiles; and the tail carried a score of caudal vertebrae.

Dr. Lowe claims that the appearance of feathers was not due to convergence or parallelism, but to the fact that birds and bi-pedal dinosaurs were united by a common genetic link. He considers that the struthious birds, or their immediate ancestors, were probably the first birds, and that the Struthionines never could fly, for, if they could, it would mean that every widely-separated (geographically) species independently lost the power of flight—"a precious gift which they had been working up to from untold ages alongside of the reptiles."—C.E.B.