

THOMAS EDMONDSTON IN THE GALAPAGOS ISLANDS

by Roger Perry, CDRS Director, 1964-70

I was interested recently to inquire into the history of Thomas Edmondston, the young British botanist who appears briefly and tragically in the story of discovery in the Galapagos Islands. As others who had worked at the Charles Darwin Research Station, I had from time to time come across the name *edmonstonei*, learning that Joseph Hooker of the Royal Botanical Gardens at Kew studied Edmondston's collections in conjunction with those of Darwin and Macrae. What I did not realise, until Alan Hayes, entomologist at the British Museum (Natural History), drew my attention to the possibility, was that other Galapagos type material could be traced to the voyage and saga of Edmondston.

Thomas Edmondston was born on 20 September 1825 at the family home at Bunes*, a small hamlet near the head of Balta Sound on Unst, the most northerly of the Shetland group of islands. From an exceptionally early age he developed an interest in natural history, a pursuit evidently encouraged by his father, Laurence Edmondston, M.D., himself a keen naturalist. An upbringing, too, amid remote and lonely surroundings, where climate made difficult any regular attendance at school, must have had its influence on a child who was both sensitive and observant by nature. These interests were channelled at first into ornithology but a chance meeting at the age of twelve with Dr. Gilbert Macnab, a botanist of some repute who was then on a tour of the Shetland Islands, gave a sudden zeal for the study of plants. And if an incentive were needed it was his discovery at that early age of a species (the Arctic sandwort, *Arenaria norvegica*), new to the British list. Two years later Edmondston was working on a *Flora of Shetland*, an initial draft of which was published in *The Annals and Magazine of Natural History* in 1841 (whilst its author was still barely sixteen years old).

That same year Edmondston went to Edinburgh where he studied botany under Dr. Robert Graham. Thereafter his career was condensed into a few brief but exceptional years. He became Assistant Secretary to the Edinburgh Botanical Society and, in his twentieth year, was elected to the professorship of Natural History in the Andersonian University at Glasgow. However, before he had time to commence his lectures he had accepted, on the advice of the naturalist and traveller Edmund Forbes, F.R.S., the post of naturalist on board HMS *Herald*, shortly to sail on a surveying voyage to the Pacific.

HMS *Herald*, under the command of Captain (later Sir) Henry Kellett, accompanied by her tender, the *Pandora*, departed from Plymouth on 26 June 1845. The enthusiasm of Edmondston for his assignment must have been considerable, for he joined the expedition without even having had time to take leave of his family. This he must have felt keenly at a port-of-call in the Falkland Islands, where the scenery was a last, perhaps poignant reminder of his Shetland home. Thence the two ships rounded Cape Horn and sailed northward along the coasts of Chile and Peru. From Callao they headed out to the Galapagos Islands.

On 6 January 1846 Gardiner Island was reached and at noon the same day they lay to the south of Floreana. Two days later a landing was made at Black Beach and a party, which included Edmondston, followed the trail into the interior of the island. From an Englishman they met there named Gurney, who was married to a sister of the Ecuadorean administrator, it was learnt that about a year before political prisoners exiled to the island had been recalled by the party newly acceding to power. About forty people then remained on Floreana, and it

had something of a deserted air, with cattle, pigs, goats and dogs all roaming in the wild. Yet the moist season had brought an impressive abundance of plants and such fruits as melons, bananas and pumpkins, which were tended in enclosures safe from the animals. Edmondston collected whatever he could in the time, though he must have been disappointed to find that the legendary 'terrapins' or tortoises were no longer living on the island.

From Floreana Capt. Kellett made the almost mandatory quest in those days to San Cristobal to replenish supplies of water. The *Herald* anchored in Stephen's Bay and from there *Pandora* went round to Freshwater Bay. Edmondston meanwhile continued his collecting but there is no word that he found tortoises in the wild even on San Cristobal; later, several of the reptiles were purchased at Wreck Bay, each some 65 cm long and priced 6 shillings (£ 1.25) apiece. The last call in the archipelago was at Santiago, where at James Bay the young naturalist duly noted pintails, the hawk and immigrant waders. On the evening of 16 January the two vessels weighed anchor and headed back to the South American mainland.

A week later, as *Herald* and *Pandora* lay off the estuary of the Sua river, some 30 miles along the coast to the southwest of Esmeraldas, disaster overtook a party returning from an excursion on shore. A gun carelessly placed in a boat was accidentally discharged and a ball passed through Edmondston's head. He died instantly and was buried on shore the following day.

Thomas Edmondston's best known contribution to Galapagos science has been his botanical collection. This comprised 41 numbers and was made with the assistance of John Goodridge, the surgeon to the expedition. The material eventually came to Kew Gardens where Hooker, moved by Edmondston's untimely death, named five plants (belonging to the genera *Iresine*, *Phaca*, *Sesuvium*, *Solanum* and *Spondias*) in his honour. 21 of the 41 plants were considered to constitute new records for the archipelago.

Unfortunately, owing to Edmondston's untimely death, confusion arose with the labelling of the collection. Several plants, initially assigned to the Galapagos Islands, were later suspected of having come from the mainland. Among these were *Iresine edmonstonei*, *Phaca (Astragalus) edmonstonei* and *Solanum edmonstonei* – none of which has since been found in the archipelago. As each occurs naturally at spots on the mainland coast visited by the *Herald*, errors in labelling must be an obvious possibility. With *Spondias edmonstonei*, the Palo Santo tree, now assigned to the genus *Bursera*, the only one of Hooker's five to have stood the test of time is *Sesuvium edmonstonei*. Nevertheless this strand endemic is a good species, known to visitors as providing the reddish ground hues to vegetation on Plaza and in other littoral areas.

Edmondston's zoological collection (if in fact he was entirely responsible for these up to this point) similarly suffered from a dearth of authentic labelling. Material presented by Kellett and Wood to the British Museum (Natural History) consists of 82 Lepidoptera, 14 Aptaera, 17 Rhynchota (bugs) and an isopod of the genus *Cymothoa* – many summarily identified as collected on the *West or Northwest Coast of America*. Two moth species however have since been determined as Galapagos endemics, namely *Psaphara interclusa* (a male, holotype) and *Gonodonta biarmata evadens* (two females, syntypes). Material of the Giant Painted Grasshopper (*Schistocerca melanocera*) may almost certainly be traced to Edmondston's collecting, to specimens taken during the first day ashore at Floreana when 'large locusts were seen in extra numbers'. It is possible that other specimens in this historic collection will come to be referred to the Galapagos Islands as particular groups are studied or revised.

It is little to the point to speculate on the future of a life so tragically cut short. None the less, it is interesting to reflect that at the time of that fatal accident another young naturalist, with a perhaps less auspicious scientific background, was yet pondering thoughts and ideas that had come to him in the Galapagos Islands. Edmonston's successor as naturalist on the *Herald* was the able Berthold Seemann, who joined ship at Panama in July 1846 and eventually undertook the writing of the narrative of the expedition. This was in fact the only published account for Kellett himself was sent upon another commission soon after his return to England. A mainland plant was named (*Edmonstonia*) by Seemann to commemorate his predecessor; this too was not to stand and was later assigned to the previously described genus *Tetrathylacium* of Poeppig.

*The house at Bunes, Baltasound still belongs to the Edmonston family, hereditary udallers of Shetland.

