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NOTES ON A VISIT TO THE DENISON RIVER HUON PINE RESERVE R. R. Shepherd

ROUTE :

THE route taken was across the bridge at the Gordon Dam site, up a badly eroded bulldozer track which runs to a saddle about half a mile from the dam, then along the top of the Hamilton Range. Camp on the first night was made at the northern end of the Hamilton Range at about 4,000 feet above the Denison River Gorge. On the second day the Denison River was reached via the knife-edged ridge at the upstream end of the gorge, and the reserve by wading up the river; the return trip to the camp was made the same day. The third day was a relatively easy walk back to the Gordon Dam site. This route and procedure is recommended for parties making a short visit to the Reserve.

The party comprised K. Felton and P. Smith of the Forestry Commission and the author. The visit was made during the last three days of January, 1972.

VEGETATION ALONG THE DENISON RIVER UPSTREAM FROM THE GORGE.

Huon Pine <u>Dacrydium franklinii</u> is the dominant and most numerous tree fringing the river bank and many pine seedlings cover bare and mossy patches. Other trees present include Myrtle <u>Nothofagus cunninghamii</u>, Sassafras <u>Atherosperma moschata</u> and Horizontal <u>Anodopetalum biglandulosum</u>. A few Silver Wattles <u>Acacia dealbata</u>, mature Blackwoods <u>Acacia melanoxylon</u> and small Dogwoods <u>Pomaderris apetala</u> were also seen.

An interesting feature observed from the river was a stand of old eucalypts, probably <u>E. simmondsii</u>, growing in the midst of what appeared to be Huon Pines on the southern slope of the Prince of Wales Range, at a level of about 200 feet above the river.

THE HUON PINE STAND

A study was made of the stand on the western side of the Denison River, in the

vicinity of grid line 7488 yards north. Here the river flows more or less from north to south, the banks are 6 to 8 feet high and, at the time, the water was knee deep.

The topography is dominated by the concave slope from the southern end of the Prince of Wales Range. Near the river the landscape appears terraced. The lowest terrace, approximately two chains wide, is fairly level and grows the tallest and largest Huon Pines seen. Here the pines form over 75% of the almost complete top canopy with Myrtle and Sassafras forming the remainder. A slightly lower canopy comprises Myrtle, Sassafras, Horizontal, Leatherwood <u>Eucryphia lucida</u> and Laurel <u>Anopterus glandulosus</u>. The ground canopy is dominated by Leech Fern <u>Blechnum procerum</u> with mosses and some litter below. There is no accumulation of humus on the ground. A few dead pines still stand and the remains of several decomposing trunks are strewn on the floor of the stand. There is little sign of regeneration of pines in this part of the stand. A group of seedlings, about four feet high and two inches in diameter, was observed growing from a very decomposed trunk on the floor of the stand.

The heights of three Huon Pine trees were measured by clinometer and tape and others measured roughly to see if taller trees could be found. The tallest tree measured was 93 feet and had a breast height girth of 5 feet $10\frac{1}{2}$ inches. A dead, fallen tree had a height of 86 feet and a breast height girth of 9 feet. An extensive search for the tallest tree in the reserve was not made, so that the 93 feet could well be exceeded and it is likely that trees of over 100 feet exist. Most of the Huon Pines were multi-leadered from a height of about 35 feet and there was a strong apical dominance in each individual leader.

Uphill on the next flat, about 70 feet above the river, the top canopy is more open but still comprises mostly Huon Pine with a few Myrtle and Celery Top Pines <u>Phyllocladus aspleniifolius</u>. Slightly below the top canopy is another layer comprising Horizontal, Leatherwood and Laurel. Cutting Grass <u>Gahnia psittacorum</u> and moss form the ground layer.

Note: The Denison River Huon Pine Reserve has since been renamed the Truchanas Huon Pine Reserve.

> WHITE-BROWED AND MASKED WOOD-SWALLOWS IN TASMANIA R. Good, A. M. McGarvie, O. M. G. Newman and D. Pinner

SHARLAND (1958) lists the White-browed Wood-Swallow Artamus superciliosus as an accidental visitor to Tasmania, and records the only occurrence of the species as 9 April, 1905 when a number were observed flying around the lighthouse at Cape Wickham, King Island. Sharland commented that although this species was unlikely to be observed in Tasmania, a careful watch should be made of the north-western coast in spring and summer. 1972 proved to be the year in which Sharland's suggestion was realised.

Green and McGarvie (1971) list the White-browed Wood-Swallow as a regular visitor to King Island from November to March each year, on the basis of records by McGarvie dating back to 1958 when a flock of ten arrived in the Egg Lagoon area. These birds were present from April to October, but three remained until April 1960.

In 1963 McGarvie observed two pairs of Masked Wood-Swallows <u>A. person-atus</u> together with four pairs of White-browed Wood-Swallows in an area of heathy scrub near Lake Martha Lavinia. This was the first record of the Masked Wood² Swallow in the Tasmanian region. Nine Masked Wood-Swallows, including three juveniles were seen about a mile south of Lake Martha Lavinia from 2 to 9 February, 1964. One Masked Wood-Swallow was found exhausted and later died, at Egg Lagoon on 15 July, 1970.

Consequently, prior to 1972, White-browed and Masked Wood-Swallows had only been recorded on King Island in the Tasmanian region and had not been proved to breed.

In late November, 1972, McGarvie observed large numbers (possibly more than two hundred) of White-browed and Masked Wood-Swallows in the Lake Martha Lavinia area. Within fourteen days birds had commenced breeding immediately to the south of the lake, but odd pairs were scattered through scrub country up to three miles further south. A total of over twenty White-browed Wood-Swallow and two Masked Wood-Swallow nests was found. However, the large number of juvenile birds subsequently observed indicated that most of the birds present had successfully bred. Some of the nestlings were banded by Mr. M. T. Templeton. The nesting area was almost completely burnt out the following January after the majority of the young apparently had left the nest.

Good was informed by Mr. F. Sharman on 5 October, 1972, and again on 13 December that a strange bird was present in the Penguin area. On the latter date Good identified the bird as a White-browed Wood-Swallow. Prolonged observation indicated that a pair of birds was present and a nest containing young was found. The nest was placed at a height of five metres in a dead ring-barked eucalypt, situated between a piece of bark and the underside of a horizontal limb, which had formed the shape of a half drain pipe. Nesting materials were similar to those used by the Dusky Wood-Swallow <u>A. cyanopterus</u>, the common Tasmanian Artamus species. The nest contained two well feathered young which had the distinctive markings of the species already formed on the head. Several days later the young were observed in the same tree, but away from the nest, being fed by the adults. During the next few weeks Mr. Sharman noted the birds feeding on many occasions and the brood of two was considered successfully reared.

Sharman and Good's record is the first of the White-browed Wood-Swallow for mainland Tasmania. The habitat occupied was a grass paddock containing scattered timber, a short distance from an area of light scrub. The location was approximately one kilometer from the coast at an altitude of less than seventy metres.

Pinner, accompanied by Messrs. L. Bird and J. Bromfield, observed a flock of more than twenty White-browed Wood-Swallows at Cape Portland, on the north-eastern tip of the Tasmanian coast on the 5 March, 1973. Male, female and juvenile birds were identified in the flock and birds were observed to obtain food, identified as grasshoppers, by dropping to the ground from low perches, such as boundary fences and low bushes. On the same day, Newman and Mrs. S. A. Newman noted a male Whitebrowed Wood-Swallow in a lightly timbered paddock bordering Sedgy Creek near Smithton, close to the north-western Tasmanian coast.

Good observed two male White-browed Wood-Swallows at Memana on Flinders Island on 24 April, 1973. The birds were sheltering from high winds on an area of semi-cleared land. When disturbed the birds flew off in a north-easterly direction. These birds probably were migrating as were numerous small groups of Dusky Wood-Swallows observed over the following two days.

The above records represent a major invasion of the Tasmanian region by These species are often reported in White-browed and Masked Wood-Swallows, mixed flocks and are well known for their nomadic tendencies. The Tasmanian extension of range may have been part of a general extension of the normal range of these species because exceptionally large flocks were reported in the Brisbane region in the spring of 1972 (Dawson and Perkins, 1973). Such extensions of range are generally attributed to unsatisfactory breeding conditions in the normal range of the species. However, the regularity with which McGarvie has recorded the Whitebrowed Wood-Swallow on the north of King Island since he moved to that area suggests that the north of the Tasmanian region is within the regular range of at least the White-browed Wood-Swallow and that this species has been missed previously on mainland Tasmania as a consequence of the dearth of active observers. It is encouraging that in 1972-73 the White-browed Wood-Swallow was recorded from three Tasmanian localities spanning the northern coast, as well as from both the major islands in Bass Strait.

McGarvie, Newman and Pinner all noted that the White-browed Wood-Swallows fed by going to the ground to take food and then returning to their perch. Pinner identified the food source as a grasshopper species. Newman noted that Dusky Wood-Swallows feeding from perches in the same tree as the White-browed Wood-Swallow hawked insects in the air and did not descend to the ground. Indeed. Dusky Wood-Swallows are rarely observed to be ground feeders in the Tasmanian It may be speculated that in extending its range in Tasmania the Whiteregion. browed Wood-Swallow was not competing ecologically with the common Artamus sp., the Dusky Wood-Swallow. However, a more pertinent conclusion may be that the White-browed Wood-Swallow is better equipped to take advantage of abundant but abnormal food sources, the harsh climatic nature of its normal range necessitating it to develop the potential to take advantage of a diversity of food sources. Indeed. Chisholm (1971) records White-browed and Masked Wood-Swallows feeding on the blossoms of a tall Silky Oak Grevillea robusta and states that these species are equipped with brush tongues, as is A, cyanopterus, for such honeyeating activities.

Chisholm, A. (1971). Aust. Bird Watcher 4, 42

Dawson, P.D. and Perkins, D.L. (1973) Sunbird 4, 19

Green, R. H. and McGarvie, A. M. (1971) The Birds of King Island. Records of the Queen Victoria Museum No. 40.

Sharland (1958) Tasmanian Birds Published Angus & Robertson Ltd.

A RECORD OF THE POMARINE SKUA <u>Stercorarius pomarinus</u> IN TASMANIAN WATERS D.R. Milledge

ON 6 January, 1973 while a passenger on the Empress of Australia crossing Bass Strait from Melbourne to Devonport, I was able to observe large numbers of skuas about the ship as it approached the Tasmanian coast. These were attracted by the even greater concentration of Silver Gulls Larus novaehollandiae picking up food scraps being flushed from the ship. From about five to one and a half miles off Devonport, over one hundred Arctic Skuas <u>Stercorarius</u> parasiticus were observed, both light and dark colour phases being present. The dark phase Arctic Skuas predominated in the ratio of eight to one.

When approximately two miles from Devonport, two Pomarine Skuas <u>Stercorarius pomarinus</u> were sighted among the forty-plus Arctic Skuas present about the ship at that time. I had seen Pomarine Skuas twice before, both times in Port Philip Bay, Victoria, and also each time with Arctic Skuas. When seen close together in these circumstances, differences between the two species are very obvious. The two Pomarine Skuas off Devonport were immediately recognisable by their size, flight action and the two blunt, twisted, projecting central tail feathers. Both were of the dark colour phase.

In size, the Pomarine Skuas were one third as big again as Arctic Skuas and looked even more bulky – this impression was accentuated by their slower, stiffer and heavier wing action. General body and wing colour was dark brown with paler buff tinged cheeks and a small amount of white mottling on the belly. The underwings were pale brown and the centres of the primaries showed a considerable amount of white on the top of the wing. Arctic Skuas generally show much less white in the primaries. The two central tail feathers, present on both individuals, were noted as being about two cm wide, blunt and twisted and projecting some five cm beyond the other tail feathers. This character is diagnostic when comparing Arctic and Pomarine Skuas although, in Australian waters, individuals of both species often lack these feathers through moult. Arctic Skuas' central tail feathers are much thinner, untwisted, pointed and project about six cm.

All skuas are parasitic on other seabirds for food, pursuing mainly gulls and terns and forcing them to disgorge. It was interesting to observe the two Pomarine Skuas seen off Devonport chasing not only Silver Gulls but also Arctic Skuas, forcing them to drop food.

Both skuas joined the ship at the same time and one remained behind for about half a mile before flying off. The other was seen only for a short time as it was left behind after alighting on the water.

A THIRD ARCTIC TERN Sterna macrura FOR TASMANIA D.R. Milledge

ON 25 December, 1972 a beachwashed and dessicated tern was picked up at Eaglehawk Neck by Shane Copping. The recovery was reported to the National Parks and Wildlife Service and the specimen subsequently recovered. The tern was carrying a leg band inscribed Helsinki Museum A-138332 and proved to have been banded on 30 June, 1961 as a nestling in a large tern colony at Osterhallen, Pernaja in the Gulf of Finland (lat. 60°19'N long. 26°33'E).

Because both Arctic Sterna macrura and Common S. hirundo Terns breed together in the colony where the chick was banded, its identity was unknown but it has since proven to be an Arctic Tern. Definite determination was provided by Mr. Allan McEvey, Victorian Museum, through the Tasmanian Museum where the specimen is housed.

Although the tern was quite dessicated, plumage was reasonably intact and in typical winter colouration. The bill was black with a little red at the base of the lower mandible and gape. Measurements were culmen 31.4 mm and tarsus 15.6mm. The wing and tail feathers were very worn and considerably shortened.

This is the third record of an Arctic Tern in Tasmania. On 24 November, 1957 a live specimen was taken by R. H. Green at Tunbridge and L. E. Wall picked up a beachwashed bird in the Derwent Estuary on 13 January 1962.

Three Arctic and Two Common Terns banded in Europe and north-western Asia have previously been recovered in Australia. Table 1 below sets out details.

It is interesting to note that the 11 years 6 months between the banding and recovery dates of the Arctic Tern from Eaglehawk Neck, is the longest period of time for any northern hemisphere banded tern recovered in Australia. Also it is the first banded adult Arctic Tern recovered in Australia.

Thanks are due to Mr. P. Andrews, Tasmanian Museum, for assisting with identification and Mr. D. Purchase, Secretary, Aust. Bird-Banding Scheme, CSIRO, for providing banding records.

Species	Place of banding	Date	Age	Place of recovery	Date	Time elapsed
Arctic Tern	Kandalaksch Sanctuary, White Sea, Russia	5 July 1955	juvenile	near Fremantle, W. A.	16 May 1956	10 months
Arctic Tern	Ekholmen Islet, Stockholm Archipelago, Sweden	1962	nestling	Madora Bay, W. A.	10 June 1963	12 months
Arctic Tern	Valley, Anglesey,U.		nestling	Bega, N.S.W.	31 Dec. 1966	6 months
Common T er n	Marum, Sweden	9 July 1955	nestling	near Fremantle W. A.	July 1956	12 months
Common Tern	Copeland Islands, Ireland.	17 May 1959	adult	Gunbower, Vic.	20 Oct. 1968	9 years, 5 months

Table 1 Northern hemisphere banded terns recovered in Australia

EASTER CAMP 1973, ADVENTURE BAY C. H. Mosey and M. L. Westbrook

AS plans were made very late this time, most members had already made their holiday arrangements. However, on the Friday there were eight starters (in two cars) and the venue was Dorloff's Caravan Park, Adventure Bay, Bruny Island.

Mr. Dorloff recalled the Field Naturalists' Camp twenty years ago — when there was a re-enactment of Bligh's Landing, complete with sailors, native girls (with seaweed skirts) and the breadfruit tree (loaves of bread hung on a tree). This was one of the social highlights of that camp. Just near the camp is the site where Bligh planted the first apple tree on Bruny Island.

This time the weather was really wild, with heavy rain, wind and hail. The site chosen for us had plenty of grassed area for tents, the use of a small van, and a most useful Recreation Room which was a large three-walled building with a huge fireplace at one end, and a tarpaulin let-down wall at the other end - and electric light. This room really made the camp possible. Three campers decided to sleep in here instead of their hike tents, three were in the van, and four hardy souls coped with hike tents - two did their cooking on a neat little fire just outside their tent, while the rest thankfully used the big fire in the Recreation Room. No trouble about drinking water - the tank was overflowing - and there was plenty of dry wood in the shed just next door.

Friday - Fitful weather, showers, wind and hail, but in between we had a walk along the beach to where Captain Bligh planted his apple tree.

Saturday - A little better. A few well-coated members spent the morning walking to Penguin Island and returned to a very late lunch. The rest, as the rain eased off, had a walk to Adventure Bay Township and the beach. That evening two more campers arrived - Mr. and Mrs. Sheppard from Queenstown - now we had our full ten. That night it teemed with rain and hailed and blew. Those under a roof thanked their lucky stars.

Sunday — Three cars to Cloudy Bay - glorious day, full tide and nine lines of pounding breakers beating up that beautiful firm beach guarded by two rocky headlands. On the beach were three kinds of dotterels — Red-capped, Double-banded and Hooded, also White-faced Heron, etc. On the way back we saw the mountains — La Perouse and Adamson's Peak. We returned to the Neck and ate our lunch there. Here the waves were much quieter than at Cloudy Bay which, of course is open to the South Pole. After lunch we continued on to Dennes Point and more birds added to our list.

Monday - Broke camp. The Sheppards were the first to get away and went down to S. Bruni Lighthouse first, over the mountain road and rain-forest - beech, Celery-Top Pine, Richeas, Horizontal, Turquoise Berry. We saw, at the lighthouse, our first Tawny-crowned Honeyeater also a lot of Dusky Robins, Scarlet Robins, Crescent, New Holland, and Yellow-throated honeyeaters, Noisy Miners and Grey Shrike-Thrush.

We had lunch here on a glorious day watching the tide race up the beach and frothing over the needles at the base of the cliffs. From the lighthouse we went 50 miles to Dennes Point and had afternoon tea at the shop there and walked on the beach. Then after tea, the round trip through Killora to the ferry at 5.20 p.m. and home by 7.00 p.m.

The bird list is a joint effort for the whole of our Bruny trips - 51 species in all. Little Penguin, Albatross sp, Short-tailed Shearwater, Australian Gannet, Black Cormorant, Little Pied Cormorant, White-faced Heron, Black Swan, Collared Sparrowhawk, White-breasted Sea Eagle, Brown Falcon, Brown Quail, Tasmanian Native Hen, Pied Oystercatcher, Sooty Oystercatcher, Spurwing Plover, Red-capped Dotterel, Double-banded Dotterel, Hooded Dotterel, Pacific Gull, Dominican Gull, Silver Gull, Crested Tern, Green Rosella, Blue-winged Parrott, Blackbird, Superb Blue Wren, Tasmanian Thornbill, Scarlet Robin, Flame Robin, Dusky Robin, Grey Fantail, Olive Whistler, Grey Shrike-Thrush, Grey-breasted Silvereye, Yellowthroated Honeyeater, Black-headed Honeyeater, Crescent Honeyeater, New Holland Honeyeater, Tawny-crowned Honeyeater, Noisy Miner, Yellow Wattlebird, Beautiful Firetail, House Sparrow, Goldfinch, Greenfinch, Starling, Black Currawong, Clinking Currawong, White-backed Magpie, Forest Raven.

During the camp various specimens were collected (shells, plants, seaweed, fungi, lichen). Specimens were displayed and discussed. There were about a dozen types of fungi - from tiny ones about $\frac{1}{4}$ " across to 8" -high Shaggycaps. The collection of flora was compared with a collection made in 1971, when the camp was at Dennes Point.

It was definitely not the weather for pushing through thick, wet bush or scrubby heath land. Most walks kept to the road or coast. In spite of the adverse conditions, all enjoyed the camp.

THE EFFECT OF EUROPEAN SETTLEMENT ON LICHEN DIVERSITY G.C. Bratt

IN 1802, Robert Brown visited and made botanical collections in the Derwent Estuary, and they were described and published by Crombie in 1880.

As these collections were made prior to European settlement of Tasmania it is of interest to compare Brown's collections with those made in recent years. The comparison is not easy because Brown's collections are in the British Museum, the many changes of botanical nomenclature and the poor accessibility and quality of many published descriptions. It is surprising that 35 of the 46 species (i.e. 80%) noted by Brown from Mt. Wellington, Risdon and near the Derwent River are still (at least from 1961-1967) to be found on Mt. Wellington, Mt. Direction or Grass Tree Hill.

One may conclude that the 170 years of agriculture, commerce and industry have not greatly affected the lichen diversity in the surroundings of Hobart. It should be noted, that the lichen population of Mt. Wellington was seriously reduced by the disastrous fires of 1967. However, as small unburnt areas remain the effect of the fires will probably be nullified in the not too distant future.

Of the eleven apparently missing species the position is not exactly clear, but the following summarises the present information. Two have not been located in Tasmania by anybody but Brown and several writers consider that the collections were mislabelled. Two others have recently been recorded in Tasmania, but outside Brown's collection areas.