

the young was entirely of shrimps (*Palaemonetes australis*). On the following day, October 13, the island was visited by a Naturalists Club party which also included Dr Frederick Hamerstrom and Dr Florence Hamerstrom, of Wisconsin, and Mrs M. B. Mills.

On October 31 Mr Max Bailey and I encircled the islet and made a census from the boat. The actual nesting site was not occupied but the young (29 individual young were counted) were on a sand bank just off the island and waddled into the sea as we approached. They were in a tight group and could not fly. They were downy, with feathers, and had pale bills. They were accompanied by 12 adults. Off Meeyip I., one of the Yundurup delta islands, 3 Pelicans were seen, one of which was evidently a young bird (smaller, with paler bill); perhaps it was an advanced young from this or one of the other Peel Inlet colonies. On November 5 I counted 32 young birds swimming in a compact group in the water off the sand island. They could not fly. On November 17 Miss V. M. Bristowe, Miss Christine Maggs and I visited the island and counted 28 young birds. They were swimming in a dispersed group, could not fly, and only flapped helplessly when the boat approached, unable to take off. The other four young seen on November 5 may have been elsewhere, as the young we counted swam quite some distance from their home island. There were few adults in the vicinity; only 4 were close by and 2 others flew in, as we watched, and joined the young birds.

—D. L. SERVENTY, Nedlands.

OBITUARY

BRUCE SHIPWAY

Bruce Shipway, Honorary Life Member of the Club, and former President (1948-49), died suddenly in Perth on May 29, 1972. He was born in Sydney, N.S.W., on March 27, 1907. His father, William Charles Shipway, a solicitor, was prominent in Sydney and Lord Howe Island affairs, and his mother was a member of the Hordern family. A brother, Phillip.



Bruce Shipway, 1966.

of the Sydney legal firm of Shipway and Berne, was for long treasurer of the Royal Zoological Society of N.S.W. and its president in 1936.

Mr. Shipway senior was a member of the N.S.W. contingent in the Sudan War of 1885 and after completing his legal course on his return founded the legal firm of Shipway and Berne in 1890. He was M.L.A. for Paddington, chairman of directors of the Kentia Palm Seed and Plant Co-operative Company Ltd. (a Lord Howe Island enterprise), a Taronga Park Trustee and Deputy Grand Master of N.S.W. Freemasons. He died in 1925.

After education at the North Sydney Church of England Grammar School ("Shore") Bruce had the chance of entering the family law firm but a desk job had no appeal. He was a high-spirited youth and for a few years led an adventurous life in Sydney. Competitive motor cycling was his first sport and he provided patrons at the Penrith Speedway with some spectacular displays. The *Daily Guardian Pictorial* in its issue of October 6, 1926, featured a photograph of Bruce riding his Clater Lea in what the paper described as "one of the most remarkable performances ever witnessed on a race track" at the final of the five miles consolation race. With one lap to go he had his back tyre wrenched off on a corner. He did not fall but kept going and was just beaten for second place within 20 yards of the finish. He then became interested in flying and in 1928 trained with the Australian Aero Club. He won the silver cup presented by Sir Charles Wakefield, the Angels Kiss Cup at Mascot and figured in another sensational incident which captured the newspaper headlines. In August 1929 at Penrith he did a parachute jump from the wing of a plane flying at 3,400ft. The rip cord failed to open after the scheduled interval—two seconds—and he struggled with the mechanism with his hands and opened the parachute after 14 seconds, falling some 1,500ft. before the parachute functioned. On another occasion due to engine failure he crashed into the Snowy River in mid-winter. He told his brother, Phillip, that it was either the river or a mountain side! He intended to take up commercial flying but a slight colour blindness prevented it. A hint of later activities was his fascination by the aquarium at Taronga Park Zoo (opened in 1927), whose construction he watched. But he seems to have been conditioned even earlier. He once mentioned that there was an aquarium in the room at home where he was born.

Before World War II, in 1930-32, he and another brother, Ron, engaged in motor transport of stock in the North-West of Western Australia. One run was from Roy Hill to Meekatharra along the "Madman's Track". During this period he noted natural history phenomena which he made use of in later papers (cf. *W. Aust. Nat.*, 1, 1947: 47).

He had earlier in Sydney served an apprenticeship in instrument technology and in Perth joined the staff of the Tough Instrument Company. This engineering skill was later applied both in his natural history activities and in his professional career.

When World War II broke out he joined the A.I.F. and became a sergeant in the survey corps. It was then that he became heavily involved in what was to become his life-time interest in natural history—the study of freshwater fishes. He first came to the notice of other naturalists by his re-discovery of Leichhardt's Sawfish. In June 1845 the explorer Ludwig Leichhardt was shown a strange fish, dead, at the edge of a waterhole in the Lynd River in northern Queensland and "I was greatly surprised to find it a sawfish (Pristis), which I thought lived exclusively in salt water" (Leichhardt, *Journal of an Overland Expedition in Australia*, 1847, p. 288). The explorer speculated on the significance of the find. Later travellers also reported sawfishes in the north but no specimens had been studied by ichthyologists until Bruce Shipway in October 1944 was able to examine a specimen from the same river as Leichhardt's, the Lynd. He gave a photograph and description to Gilbert Whitley, the ichthyologist at the Australian Museum, Sydney, who in the *Australian Zoologist*, 11 (1), 1945: 43-45, reported this re-discovery of "Leichhardt's Sawfish", as he termed it, and gave the fish a new name and formal description—*Pristiophorus leich-*

hardtii, though some modern workers doubt whether it should be regarded as a separate species. Shipway also saw the fish in the Walsh, Mitchell and Palmer Rivers, and Whitley surmised that it was "obviously a permanent resident of the rivers and not a fortuitous visitor." Besides the sawfish discovery he accumulated material for publication himself, including a series of illustrated papers on the fishes of the Barron River.

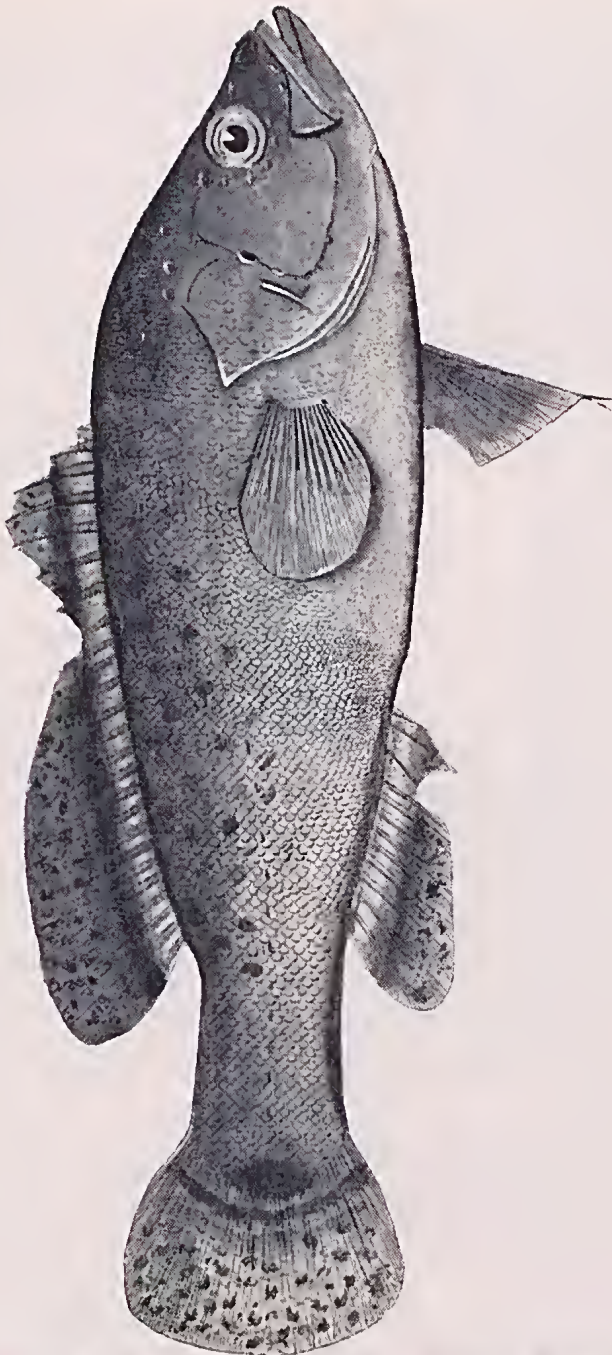
On transfer to Western Australia he was engaged in Army surveys north of Perth, and when peace returned he continued in survey work, this time in the Avon valley on the standard gauge railway project. He resumed association with the W.A. Naturalists' Club which began on his earlier stay in W.A., and henceforth was always linked with its activities. These were mostly concerned with freshwater fishes and other aquatic fauna. He was expert in making and equipping aquariums, and was outstanding in the study of life histories from aquarium observations. His exhibits at the Wild Life Shows in the Perth Town Hall, from 1946 onwards, attracted wide public interest. An early lecture to the Club preceded by many years general concern at stream pollution. At the general meeting in the W.A. Museum in February 1946 he screened a movie film he had made himself of Queensland scenery and wildlife which included a scene showing how a brook teeming with fish and plant growth could be destroyed by a mere trickle of effluent from a nearby camp.

When the CSIRO Division of Fisheries began its sea-going fisheries investigations in this State, with the F.R.V. *Warreen* (Captain C. E. Pedersen) Bruce applied for and was appointed to the post of Technical Officer in December 1946 and he and the writer were together for over three years whilst he remained in the service. He made cruises all around the coast, to Timor, across the Great Australian Bight and to Tasmania. He also participated in land and coastal surveys and mapped the interesting shoreline feature, the 12-mile beach east of Hopetoun which at the time supported a rich fishery on Australian Salmon. In 1948 he participated in the R.A.O.U. camp-out at the Murchison River, discovering and describing a new species of the fish genus *Eleotris*, which Gilbert Whitley later placed in a new genus named after him, *Shipwayia*.

In January 1950 he resigned to become Curator of the trout hatcheries at Pemberton for the Pemberton-Warren Trout Acclimatisation Society. Here, though he was mainly concerned with trout management, as a sideline, at the suggestion of Mr. A. J. Fraser, Director of Fisheries, he investigated the life history of Marron and the ecology of local streams. He prepared a useful pamphlet on pond fish farming, which, however, was never published. He became impressed with the lack of nutrients in the fresh waters and the consequent sparsity of their animal life. He hurt the pride of his employers, who held a pardonably exaggerated view of the productivity of their waters, by paraphrasing Winston Churchill: "Never have I seen so much water with so little in it."

As may be imagined Bruce did not stay long in this post. His inability to suffer fools gladly, and the independence of mind ingrained in him by his early upbringing, meant he often changed jobs. He could not bring himself to be agreeable to anyone for whom he had no respect, even if they were important personages on whom most people fawned. After he left Pemberton in 1952 he decided he had had enough of being in service to others. He achieved independence by acquiring an engineering company, the Burrows Engineering Company, which he re-named the Jay Bec Engineering Company, making it a vigorous and successful enterprise. In 1970 it was re-named the Acme Engineering Company.

Freshwater biology continued, however, to be his private hobby. He was a foundation member of the Aquarium Society of Western Australia in September 1953 and was its president for several years. He held high hopes, after his retirement from business, of continuing research on local fishes on the lines of his paper on the Pigmy Perch (*W. Aust. Nat.*, 2, 1949): 1), beginning with the Nightfish, *Bostockia porosa*. Unfortunately a serious hip injury, caused by a fall on the floor of his factory in August, 1962, incapacitated him and this led indirectly to his premature death following



The Nightfish, *Bostockia porosa*. An adult specimen drawn by Bruce Shipway. Mature specimens range in total length from 90 to 120 mm. The specimen drawn was 110 mm.

a heart attack and two strokes.

The work on *Bostockia* was not completed. We publish herewith a drawing he had made of the species in connection with the project. He had considerable facility for drawing fishes and some of his later papers were excellently illustrated. A set of his fish drawings is preserved in the club's archives.

In July 1949 he married a fellow Club member, a widow, Mrs. Irene Metcalfe (born Monck), with kindred interests in freshwater natural history, who was associated with him both in his hobbies and business career. In the engineering company she specialised in the administration side whilst Bruce was concerned mainly with the technology. Mrs. Shipway was a foundation council member of the Aquarium Society and was his companion on field trips and associate in aquarium work at home.

Bruce Shipway impressed all his naturalist friends by his zest for life, his enthusiasm for wildlife and particularly freshwater fishes. He was generous to fellow workers and kind and encouraging to all younger naturalists. Personally he was a most kind and considerate man. This was exemplified to an extraordinary degree by the devoted care he bestowed on his bed-ridden mother, an arthritis invalid of many years. She came to live with him in South Perth and he looked after her until she died in June, 1949.

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—D.L.S.