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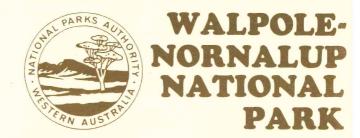
Department of Biodiversity,
Conservation and Attractions

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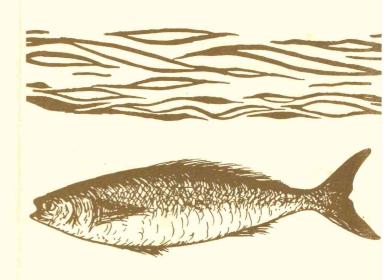
The whole fish are then loaded onto a barge (in this case the ingenious use of a swimming pool mould with an outboard motor) which transports the possible 3-4 tonne catch across the Nornalup Inlet. Trucks from a processing works, which is in radio contact with the fishermen, pick up the catch and transport it to Albany or Perth where it is canned for Western Australian domestic consumption. The catch from this particular beach by the Walpole Fishing Co. is approximately 20 — 30 tonnes per year.

#### AFTER THE ACTIVITY

At the end of the salmon season, the camp, including a hut, fishing gear, machinery and other equipment is entirely removed from the tidal beach and in the days to follow, till the next fishing season, the deserted beach gives no clue of the industry and livelihood it temporarily supports.



## SALMON FISHING



NATIONAL PARKS AUTHORITY

HACKETT DRIVE, NEDLANDS,
WESTERN AUSTRALIA, 6009 4 M 12 84 II

Arripis trutta, the Australian Salmon

## WALPOLE-NORNALUP NATIONAL PARK

Walpole-Nornalup National Park is an area reserved for the preservation of scenic beauty, wilderness, native wildlife, indigenous plant life and areas of scientific importance, and to provide for the appreciation and enjoyment of those things by you, in such a manner (and by such means) as will leave them unimpaired for the future.

#### VISITOR ACTIVITY

Appropriate use of a National Park is also any activity which is inspired by and derives its enjoyment from the natural character and features of the Park.

Visitors to Walpole-Nornalup between February and April of each year can, if lucky, participate as observers, in an activity which is interesting and unusual for a national park.

The Walpole-Nornalup National Park because of its geographical local is adjacent to the course of one of natures remarkable phenomena, the annual migration and spawning run of the Australian Salmon.

## THE AUSTRALIA SALMON

Since time immemorial, the Australian salmon Arripis trutta which is found in the Southern Ocean off the Australian mainland and east into

the Tasman Sea, has instinctively travelled along the south coast of Western Australia in its quest to return to its birth place to spawn.

The fish is in fact, a variety of Sea Perch which was misnamed by early colonists because of juvenile colour similations to the true salmon of their home country.

#### TWO SUBSPECIES

In 1950 it was reported that there were in fact two distinct subspecies, an eastern and a western variety. The two subspecies were identified by the different number of rakers on the first gill arch — the eastern subspecies having 33-40 rakers and the western subspecies only 25-30 rakers. The variation in the number of rakers was attributed to the feeding habits of the fish in its early stages of evolution — the eastern subspecies with its large number of rakers probably fed on small plankton forms while its western counterpart fed on large and coarser plankton and other marine life.

Sampling of juvenile fish in the Victoria and Tasmanian inshore and estuarine areas revealed a mixing of the subspecies — both separate schools and mixed schools.

Further sampling along the eastern and western coasts of Australia determined a separate geographical distribution of the two subspecies (Fig 1).

It is not known what great instinctive power enables the maturing juveniles to separate and head for their birth places off the south east and south west coasts of Australia.

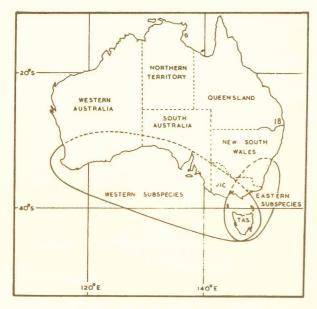


Fig. 1.

Areas showing the subspecies distribution and overlap nursery area in Tasmanian/Victorian waters where juveniles congregate before migrating.

#### THE WESTERN SUBSPECIES

From the common nursery area of Victorian/ Tasmanian waters, juveniles (up to 3 years of age) head west to join mature fish in the Great Australian Bight where they stay until they reach adulthood at 5-7 years of age.

### **SPAWNING**

Spawning happens anywhere from about Ceduna in South Australia, to the south west coast of the continent, with the intense area being between Cape Leeuwin and Busselton in Western Australia. The time of departure of the maturing fish from the nursery area is unknown, but it appears that the movement is so timed that

the fish move along the southern coast of Western Australia between February and April (when the South Coast Fishery is in action) en route to the area of intense spawning.

After finding suitable hydrological conditions, the Salmon spawn and the eggs are then at the mercy of the ocean. Salmon eggs hatch very quickly and the young free floating larvae appear within 36 hours. They are then borne by the currents at that time of the year and are virtually transported south and east. On the journey they develop into free swimming fish and eventually reach and stay in the eastern extremity of their range until they become juveniles. The cycle then begins again.

#### THE PROFESSIONAL FISHERY

Since the early 1950's, the Australian Salmon has been established as a reliable food source and a professional fishery is now in existence on the south and south-west coasts of Western Australia.

A professional fishing license was granted by the Western Australian Department of Fisheries & Wildlife in 1974 to fish the schools on their migratory run past the Walpole district. The particular fisherman who currently operates this permit is one of 37 licensed teams which seasonally harvest the Australian Salmon in Western Australian waters.

Not all coastal environs are suitable for this type of fishing (which is done with a beach seine net) and the fish themselves prefer to "school up" off quiet inlets and good beaches, therefore only selected areas of the coastline are regular salmon fishing beaches.

### RESPONSIBLE FISHING AND SPECIAL PERMIT

The mouth of the Nornalup Inlet is one such place and the salmon fisherman, having proved himself to be a responsible professional, has been granted a special permit with rigid conditions by the National Parks Authority to enter and traverse the Walpole-Nornalup National Park in pursuance of his livelihood from the Southern Ocean. To ensure efficient organisation, an authorised temporary camp for the fishing team is established on the tidal bar at the mouth of the Nornalup Inlet. Net fishing is not allowed in the scenic environs of the Walpole and Nornalup Inlets, but this does not affect salmon fishing which is an ocean fishery.

#### FISHING PROCEDURE

After a school of salmon has been spotted in the shallows of the ocean side of the inlet bar, a boat is launched and from the stern, a seine net is released (fig. 2.). After surrounding the fish, the boat then returns to the beach (Fig. 3).

The seine net, (some 200m long with a 7-10cm mesh) having weights on the bottom edge and floats on the top edge, engulfs the entire school of fish. Both ends of the net are then manually pulled from the shore until the entire catch has been beached (Fig. 4.)

