

## Effects Of The Tides By Geoff Wilson

We have examined the causes of our ocean's tides. Now let's look at how the tides affect fish. Tidal effects on fish behaviour is best observed inshore rather than out at sea so the shoreline is the best place to begin our observations.

### The Intertidal Zone

The intertidal zone is the area between the highest point reached by the tide and the furthest point to which it recedes. Naturally, on a gently sloping shoreline, a tide with a range of say 1.5 metres, will uncover a vast amount of ground as the water recedes. On a steeply shelving beach only a fraction of this ground will be uncovered.

The intertidal zone has long been a fisherman's standby for collecting bait-like worms, clams, yabbies, crabs etc. Unfortunately, the intertidal zone has been plundered in recent years, less by anglers than groups of people accustomed to harvesting these creatures for food on beaches in their countries of origin. For this reason, restrictions have been introduced in some of the most popular bait gathering areas and anglers may no longer be allowed to gather the creatures mentioned, even for the purpose of using them for bait.



Tidal Lagoons like the Grammar School Lagoon (Limeburners Bay) in Geelong can produce good fishing at times, provided you know when to fish them. First two hours of the incoming tide is a good time to begin here.



The tide is out on the Barwon River estuary at Barwon Heads. The crabs don't have to look up the tide chart, there are thousands as far as the eye can see. (Photo Glenn Mitchell)

However, it is not only anglers who regard our intertidal zone as a marine supermarket. Who else seeks the creatures of the intertidal zone? Fish do.

When the tide comes in during the day, a wide variety of fish including mullet, whiting, and juvenile fish of many types, browse the intertidal zone in search of nourishment. When the tide comes in during the late evening and night, sharks and rays join the hunt too. And, along some of our ocean beaches, larger fish like [Mulloway](#) may be present as well.

As anyone who spends a lot of time wading the shallows with a flounder light and spear will tell you, the amount of fish to be found in water less than waist

deep may be truly astonishing. For this reason, anglers may fish the high tide with some expectation of success, even in areas where the receding tide leaves the beach high and dry.



Launching at Seacliff in South Australia requires prior knowledge of the tides. (Photo Ian Vaughan)



Damon Sherriff catches these big sea mullet on the fly in Supply Bay on the Tamar in Tassie. Waste of time going unless you know what time of the tide though (Photo Sarah Sherriff)

### Beyond the Intertidal Zone

Beaches facing the ocean are frequently more productive to anglers when the tide goes right out. This is because a situation frequently develops where fish gather in some considerable number beyond the shore break waiting for the tide to start coming in so they can feed in the very productive intertidal zone. This effect is particularly pronounced when there is a dead low tide in the evening. This is because the number, variety and size of fish which feed in the intertidal zone at night is greater than it is during the daytime.

The very best examples of fish anticipating the rising tide covering the intertidal zone are in tropical rather than temperate climates, particularly in those areas where there is an exaggerated tidal range.

### Coastal Lagoons and Inlets

Coastal lagoons are typically bodies of water substantially separated from the sea by an isthmus of land, spit or sand barrier. They may be fed by one or more streams or rivers and cover a large area, possibly as a consequence of being blocked off from the sea for long periods.

As the water level inside the lagoon rises, it may forge an entrance to the sea which may be several metres deep. However, when the level of water in the lagoon subsides and the flow of water out to sea is reduced, wave action, and the movement of sand will usually close the entrance until another flood occurs.

However, some lagoon entrances remain permanently open to the sea due to their geography and may even permit the passage of vessels, from small boats to large ships. These are called *tidal lagoons* or *inlets*, and, because they do remain open to the sea, are important nursery areas for both inshore and offshore fish species.

As well as nursery areas for the progeny of larger fish, tidal lagoons and inlets usually support healthy resident populations of adult fish of many species. In temperate areas these would include flathead, flounder, whiting, mullet and bream. In tropical areas the list includes many more.

In addition to the resident fish populations are species which visit the inlets from time to time, remaining sometimes for several months while conditions are favourable. In temperate areas these would include [Mulloway](#), [Snapper](#), trevally, salmon, [Tailor](#) and a wide variety of sharks and rays. In tropical areas the list increases exponentially.



Angler fishing for luderick from Jemmy's Point just inside the entrance to the Gippsland Lakes. Of course the tide has to be right.



Geoff Wilson with a big dusky flathead taken on a soft plastic while wading the shallows of Bemm River in Gippsland. A knowledge of the tides was helpful.

### The Shallows

Most tidal lagoons and inlets have large shallow areas, often with mangroves and other vegetation. These are the nursery areas supporting small fish. This is not to say that predators are not present here as well, but these mangrove flats and shallows do provide sufficient shelter for a significant percentage of hatchlings to reach adolescence.

Undoubtedly the most effective shallow water predator is the [Dusky Flathead](#). Other flathead populate the tidal flats as well, but the dusky is the largest of the flathead species and generally found in the shallowest of water.

### The Channels

The channel system within a tidal lagoon may be simple or complex. It begins with the entrance to the seas, which, if a permanent entrance, is usually quite deep. The next important channel system is the rivers or streams feeding the inlet with fresh water. These may be also quite deep.

While the river and entrance channels are usually the main ones, there are always other channels and depressions within the inlet. These are the highways of fish movement, particularly for the larger fish which may include [Mulloway](#), trevally, [Tailor](#), salmon and many more. Major tidal lagoons

in temperate water frequently have a run of medium to large [Snapper](#) as well.

### The Tides

When the tide comes in, a good many fish move in with the tide, or may spread out over the sand flats in search of food. The incoming tide is a period when most fish seem to be mobile.

When the tide begins running out, a lot of fish move off the flats and back into the channels. This is when big flathead tend to dine well, snapping up any incautious fish or crustacean which has left its run a little late from the shallow flats back into the channel.



The estuary angler's ultimate prize, a good size mulloway. But you don't catch very many unless you have a knowlegde of the tides.

The outgoing tide is also the time when the larger [Mulloway](#) take up positions amongst any shallow reef near the entrance to snap up any stragglng mullet, small salmon, garfish or prawns moving out on the outgoing tide.

When the outgoing tide eases right back to a trickle, then it is time to fish the channels.

You'll know because the shallow flats are all exposed and sometimes to the extent the inlet seems to be almost completely devoid of water.

Certainly the water in the channels will be discoloured, sometimes even brown and muddy looking, but that is where just about every fish remaining in the inlet will be. Find yourself a channel with some depth; and when I say some depth I mean it could be only two or three metres deep, but that is still where the fish will be at this stage of the tide.



Double headers at the Deviot Jetty on the Tamar in Tassie are common, but only as the tide begins to come in, or begins running off.

After a while the current will slacken right off and you will probably notice water rising on the banks. The most important thing is to stay exactly where you are, because you will be in the best spot right up until the incoming tide faces your boat in the other direction and you begin catching drifting weed on your line. Then it may be time to move somewhere else.

### At Sea

In a boat at sea, the tides are less obvious, nevertheless they do have an influence. Even where tides are not noticeable, fish activity generally has a pattern, and that pattern is typically related to the tides.

Normally, the best time to fish offshore is from very first light until an hour or so after sunrise, and then from an hour or so before the sun sets until it becomes completely dark. However, there are peaks of fish activity throughout the night and day, and these periods of fish activity are generally related to the tide.

A typical example might be the anglers who have taken the trouble to be on the water by first light, have bagged several good size [Snapper](#) by sun up, but by mid morning, have found the action has slowed somewhat. They have stayed out because the weather is good, and are surprised to find renewed action on [Snapper](#) again toward the middle of the day.



Mick Kollaris with a nice size mulloway from the Barwon River.



Sharks rely on the tides as well. Bill Athanassies with a bronze whaler shark, one of several he has caught but then Bill is a student of the tides.

Chances are, the fish kicked in again on the change of the tide, even though that tide change might not have been noticeable to the anglers in the boat. Sometimes, the tide generates quite a strong current in the ocean, just as it does in the confines of lagoon and estuary entrances. When this occurs, the tide changes are more obvious, particularly in calm weather when an anchored boat will swing around and face into the current.

At such times, islands and exposed reefs offering shelter to a good many species will continue to do so, but on the downstream side of the tide. Naturally, predatory fish also move to take advantage.

It may happen that an island or exposed land mass is so shaped that one side offers a good deal more shelter than the other side. In such a case, fish may be present or active on one tide only, with the scene shutting down at the change of tide.

Like inshore fisheries, these offshore locations require very specific knowledge requirements and fishing them successfully is often a matter of trial and error until a pattern of behaviour is established.