

New Killer Whale "Pod" Discovered Near Victoria

By Eric L. Walters, Robin W. Baird and Tamara J. Guenther

On September 6, 1992 a group of about 75 killer whales was discovered several miles south-east of Victoria, in Juan de Fuca Strait. This in itself is not an unusual event since groups of up to 90 killer whales are regularly seen in this area. However, since an individual killer whale is identifiable based on distinctive features of the dorsal fin and saddle patch, and the pods which use this area are well known (see Bigg *et al.*, 1987), it was easily determined that this group had not been seen here before.

Vinz Eberle, a spotter working for a local whale watching company (Seacoast Expeditions) initially sighted a large group of killer whales south-east of Discovery Island on the morning of the 6th. One of us (ELW), working as a naturalist on the "Porpoise II", realized upon seeing a few individuals, that the group was not one of the regular "resident" pods, and yet was too large to be a group of "transients". (The resident pods that regularly use this area range in size from 16 to 56 individuals

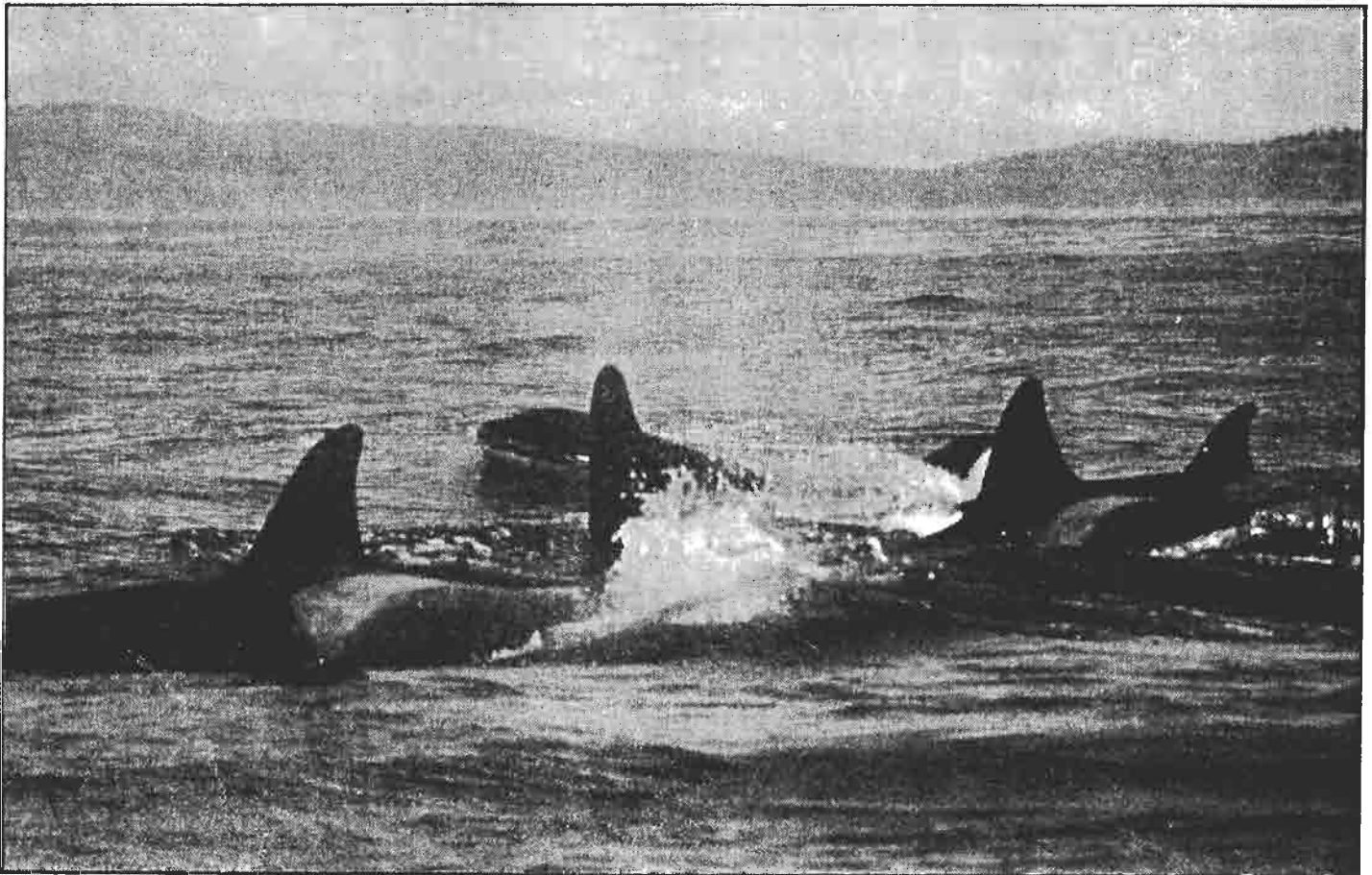
while transient pods are typically composed of 1 to 4 individuals.)

Local researchers, both from the Marine Mammal Research Group (RWB and TJG) and the Center for Whale Research (Friday Harbour, WA), were notified and immediately proceeded to the area. The attempt to obtain good left- and right-hand side photographs of each individual for identification purposes was difficult. The whales were spread out over several miles (in groups of 2 to 20 individuals), group composition changed frequently, long dives lasted up to five minutes, and surfacing patterns were erratic. Since there were so many animals spread out over such a large area, and because the animals were unfamiliar, it was difficult to determine if a particular individual had been previously photographed. As well, high quality photographs were needed, particularly for animals which did not have notches or tears in the dorsal fin, since identification then relies on saddle patch shape and markings.

In total, about 25 rolls of film were taken, the majority by researchers from the Center for Whale Research (Ken Balcomb, Diane Claridge, Dave Ellifrit and Astrid van Ginneken). Analysis of the film for identification of individuals was undertaken by the Center. To date, 65 different whales have been identified from the group, none of which had been previously recorded in the Victoria area. Photographs are currently being checked for matches with previously catalogued whales in other locales in the Eastern North Pacific.

Why is this important? Research on killer whales in the inshore waters around southern Vancouver Island was initiated in 1973 and all three large resident pods were "discovered"

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Small subgroup of "offshore" type killer whales seen September 6, 1992. Photo by Eric L. Walters.

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almost immediately (Balcomb *et al.*, 1982; Bigg, 1982). Since then, while the number of known transient killer whales which use this area increases each year, no new large group of killer whales have been documented off Victoria.

Up until recently, killer whales in B.C., Washington State and Alaska have typically been divided into two forms, "residents" and "transients", which appear to specialize on different types of prey, and are likely reproductively isolated populations (Baird *et al.*, 1992). In the last few years, large groups of killer whales have been recorded off the west coast of Vancouver Island and off the Queen Charlotte Islands which do not appear to easily fit the resident/transient dichotomy. These groups have preliminarily been termed "offshore" killer whales, since they were first documented in open water off the west coast of Vancouver Island. The whales observed on September 6 seemed to exhibit behaviours characteristic of both forms previously mentioned, similar to these "offshore" groups. They resembled the resident form in terms of group size yet travelled in a manner similar to transients (*i.e.*, long dives, erratic movements). No predation on either fish (like residents) or marine mammals (like transients) was observed in the eight hours the whales were followed; however, sporadic periods of milling similar to residents foraging on fish was seen a number of times.

In terms of morphology, these whales appeared to have characteristics of both forms. The tip of the dorsal fins generally appeared rounded, like residents, while saddle patch pigmentation patterns were more similar to transients with no black intruding into the greyish white saddle (Baird and Stacey, 1988). A number of the whales in the group seen on September 6 did have some black intruding into the saddle patch, but in a pattern unlike that typically seen in residents. As well, these animals seemed to be smaller than either transients or residents, with the largest males present appearing to be equal in size to "sprouting" (teenage) whales that we are familiar with. Another possibility, however, is that no full-grown males were present in the group seen September 6.

Transient and resident type killer whales have not been known to associate with each other, nor have northern residents been recorded with southern residents. Likewise, "offshore" whales have not been recorded in the company of any known transient or resident whales. There is a possibility that these "offshore" whales may be a third form of killer whale which specializes on offshore prey populations. The perceived size differences might then be explained by the generally lower productivity of offshore waters. Offshore individuals of a variety of other species of odontocetes are smaller than inshore animals, possibly for this reason (see review in Amano and Miyazaki 1992).

One important consideration raised by this encounter is that groups of killer whales, even in an area with extensive long-term research coverage, should not be overlooked in terms of their potential to add to our existing knowledge of this species. Prior to this encounter, all sightings of large groups of killer whales in this area were assumed to be of one or more of the commonly encountered resident pods, but this sighting clearly shows that little can be assumed merely from the group size. One must bear in mind that the notion that these may be a third type of killer whale is merely speculative and more

research is needed. Since virtually nothing is known about this potential "offshore" population of killer whales in B.C., extensive research effort is needed in offshore waters. It is likely this large group should not be considered a "pod". For resident and transient killer whales, a pod has been considered a group of whales that spends the majority of their time together. The September 6 group was likely an association of several smaller, more discrete, groups. Members of the public and individuals otherwise out on the water can help in furthering our understanding of this species by recording and reporting all sightings. Sightings should be reported to 380-1925 in the Victoria area or toll-free anywhere in B.C. to 1-800-665-5939.

For more information, contact the authors at: Marine Mammal Research Group, Box 6244, Victoria, B.C. V8P 5L5 (Fax 380-1206).

Literature Cited:

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harbour porpoise



Dall's porpoise

WHALE HOTLINE

Report marine mammal sightings
and strandings to:

380-1925 in the Victoria area
On the water: VHF channel 68 to the vessel *Sundiver*

1-800-665-5939 toll-free anywhere in B.C.

All sightings, no matter how old, are useful for research purposes and are entered into a computer data base. Records are available to all researchers. When current local sightings of killer whales or any unusual species are reported, researchers will try to respond to them. Please report date, time, location, description of the animals, number, direction of travel, and behaviour, as well as your name, phone number and address in case further information is required.