Marine Turtle Newsletter 95:15-16, © 2001

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Occurrence Terminology for Marine Turtles

Bruce L. Wing¹ & Robert Parker Hodge²

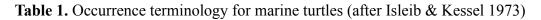
¹Auke Bay Laboratory, 11305 Glacier Highway, Juneau, AK 99801-8626, USA (E-mail <u>bruce.wing@NOAA.Gov</u>);

²ME2, POB 1521 Gig Harbor, WA 98335-1521 USA.

A variety of qualitative terms have been used to describe occurrences of animals beyond their breeding ranges, primary foraging areas and known migratory patterns. The number of terms becomes large and often confusing when describing occurrences of warm and temperate marine species in remote areas, little studied locations, and the high latitudes. A brief sampling of terms applied to atypical marine turtle occurrences worldwide includes 'accidental' (Pope 1939; Stinson 1984), 'curiosities' (Cook 1984), 'displaced' (Hubbs 1960; Radovich 1961), 'expatriates, extra-territorial, sporadic, stragglers, transient,' (Marquez M 1990), 'in transit' (Balazs 1973), 'off course' (Ebbesmeyer 2000; Gregory & Campbell 1984), 'poor waifs' (Brongersma 1995), 'scarce' (Chu-Chen 1982), 'sporadically' (Mitchell 1994), 'stray' (Brongersma 1992; Eckert 1993; Marquez M 1990), 'strayed' (Richardson 1997), 'vagrant' (Gomez 1980), 'visitors' (Balazs 1982) and 'waifs' (Eckert 1993; Marquez M 1990).

No uniform, widely accepted terminology exists for categorizing marine turtle occurrences worldwide. Although not widely recognized, marine turtles occur more often than expected and are a natural part of the Alaskan marine environment (Hodge & Wing 2000). Marine turtles, like birds, have high mobility, are widely distributed and occur outside expected ranges. In Alaska the ornithological community uses a widely accepted 'occurrence terminology' developed by Isleib and Kessel (1973) to document occurrences and status of birds in the state. Hodge and Wing (2000) found this terminology worked successfully for marine turtles in Alaska as the number of documented occurrences increased (Table 1). 'Accidental,' became 'casual,' 'rare' and 'uncommon' as more became known about a species' frequency of occurrence in Alaska (Table 2). Although this terminology remains imprecise, it provides a scale for occurrences and as such may be scored for ranking (ordinal) statistical procedures. Such tests may be useful when comparing distributions from geographical areas and changes in distribution over time.

Term	Definition					
Accidental	Species has been recorded only a time or two; it is so far from its usual range that further observations are considered unlikely.					
Casual	Species has been recorded no more than a few times, but irregular observations are likely over a period of years.					
Rare	Species occurs, or probably occurs, regularly within the region but in very small numbers.					
Uncommon	Species occurs regularly, but utilizes very little of the suitable habit and/or the region regularly hosts relatively small numbers of the species; not observed regularly even in appropriate habitat.					
Fairly Common	Species occurs in only some of the proper habitat and large areas of presumed habitat are occupied sparsely or not at all and/or the region regularly hosts substantial numbers of the species.					
Common	Species occurs in all or nearly all proper habitats, but some areas of presumed habitat are occupied sparsely or not at all and/or the region regularly hosts large numbers of the species.					
Abundant	Species occurs repeatedly in proper habitats, with available habitat heavily utilized, and/or the region regularly hosts great numbers of the species.					



Species	Accidental	Casual	Rare	Uncommon	Fairly Common	Common	Abundant	Occurrences 1960-2001
Dermochelys								19
Chelonia							100000	15
Lepidochelys								3
Caretta								2

 Table 2. Marine turtle occurrences in Alaska through 2001.

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