NOTES

1. The Sea Snake *Hydrophis spiralis* (Shaw); A New Species of the Fauna of Thailand.

During the course of a survey of the snakes of Phuket Island and the adjacent mainland areas of Peninsular Thailand (Frith, this issue), I have examined three specimens of the sea snake *Hydrophis spiralis* (Family Hydrophiidae; Subfamily Hydrophiinae). These specimens are part of the collections of the school at the Moslem island village of Ko Panyi, Phangnga Province, West Peninsular Thailand, which consists of natural history material admirably collected locally for the education and interest of the children and visitors. All three specimens are well preserved in dilute formalin solution and are clearly labelled as being taken from the Gulf of Phangnga, or Phangnga Bay, on separate occasions.

I have identified these three snakes to my complete satisfaction with the aid of standard herpetological literature available to me, which consists of Smith (Monograph of the sea-snakes Hydrophiidae. Trustees of the Brit. Mus. London. 1926), Smith (Bull. Raffles Mus., 3:1-149. 1930), Tweedie (The Snakes of Malaya. Government Printing Office, Singapore. 1957. Second edition), and Taylor (Univ. Kansas Sci. Bull. 45:609-1096. 1965). The species is not a difficult one to determine; in view of the narrow nature of it's black complete bands relative to the wider paler interspaces (see Pl. XI), the black margins to the feebly imbricate dorsal scales, and the scale counts (see Table 1) and other characteristics. In addition the three specimens, one adult and two young individuals, show the difference in head coloration between old and young snakes of this species as described by Smith (1926, 1930); being
yellow in the former and black with yellow markings in the latter (see pl. XI). Moreover all show the characters attributed to this species of irregular black dorsal spots between the black bands, and parts of a median black ventral line (Smith 1926, 1930). In view of Taylor’s (1965) statement that H. spiralis is very likely to be confused with H. cyanocinctus I note that this possibility has been particularly considered and that there is no doubt concerning the identity of the specimens here discussed and illustrated.

Smith (1926, 1930) gives the distribution of H. spiralis as being from the Persian Gulf to the Malay Peninsula and Archipelago but he points out that it is only known from Penang and Singapore on the peninsula. Taylor, in his much more recent (1965) and comprehensive review of the snakes of Thailand, points out (p. 1030) that H. spiralis “is not known from the seas bordering Thailand; however it’s presence on the west coast of the peninsula is probable, since it is known from Penang.” He did not mention, however, the Burmese locality of Pegu, Moulmein given by Smith (1926). In any case Taylor was quite correct to expect this snake to be found on the west peninsula coast, as indeed he was with regard to the sea snake Laticauda colubrina (see Frith, Nat. Hist. Bull. Siam. Soc. 25:209. 1974.); and the present record from Phangnga is presented here as the first for Thailand as Suwatti (Fauna of Thailand. Department of Fisheries. Bangkok. 1950) and Taylor (1965) excluded the species from their reviews.

The three preserved specimens are blue-grey dorsally, paler on sides and fading to yellowish-cream on the venter. The narrow bands are jet black dorsally fading a little dorso-laterally and ventrally. Hydrophis spiralis is in fact the largest species of sea snake known, in terms of body length (Tweedie 1957), with a specimen from Penang, Peninsular Malaysia, having a total length of 2745 mm., or nine feet (Wall, J. Bombay Nat. Hist. Soc. 22: 404. 1913). Measurements, scale counts and the number of black bands present on the Phangnga specimens are given in Table 1, together with the known variation of these characters.
Specimens 1 (right) and 2 (left) of the sea snake *Hydrophis spiralis* (Shaw) from Phangnga Bay, West Peninsular Thailand. Above, dorsal view; below, ventral view. Note narrow nature of dark bands, and parts of a median black ventral line.
Table 1. Measurements (in millimetres) and scalation details of three specimens of the sea snake *Hydrophis spiralis* (Shaw).

<table>
<thead>
<tr>
<th>Specimen.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Known range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length.</td>
<td>1462</td>
<td>815</td>
<td>720</td>
<td>to 2745</td>
</tr>
<tr>
<td>Tail length.</td>
<td>103</td>
<td>58</td>
<td>47</td>
<td>—</td>
</tr>
<tr>
<td>Scale rows at mid body.</td>
<td>35</td>
<td>35</td>
<td>47</td>
<td>33–38</td>
</tr>
<tr>
<td>Scale rows on neck.</td>
<td>28</td>
<td>30</td>
<td>27</td>
<td>25–31</td>
</tr>
<tr>
<td>Ventral scales.</td>
<td>331</td>
<td>340</td>
<td>316</td>
<td>295–362</td>
</tr>
<tr>
<td>Subcaudal scales.</td>
<td>47</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of complete black bands</td>
<td>46</td>
<td>50</td>
<td>41</td>
<td>35–50</td>
</tr>
</tbody>
</table>

Note 1. The known ranges of characters are from Smith (1930), except the number of black bands which is from Tweedie (1957).

I am pleased to express my gratitude and sincere thanks to the Principle of Ko Panyi School and Miss Ratsuda Tantanasiriwong for their kindness in drawing my attention to the snake specimens, without which this species might still be lacking from the list of Thailand fauna.

*Clifford B. Frith*

P.O. Box 100
Phuket Province
Thailand.