

**BALISTIDAE*****Monacanthus hispidus* (Linnaeus)**

**Spawning:** Prolonged, possibly year-round south of Cape Hatteras.

**Eggs** — Undescribed.

**Larvae** — Deep-bodied with narrow peduncle.  
 — Mouth very small and terminal.  
 — Adult body shape assumed at about 5 mm.  
 — Pelvic and dorsal spines develop early, the latter with secondary barbs.  
 — Fin rays well developed by about 8 mm.

**Meristic features**

Myomeres : 19  
 Vert : 7+12  
 D : II, 29-35  
 A : 28-35  
 Piv : I  
 P : 12-15  
 C : 0+6+6+0

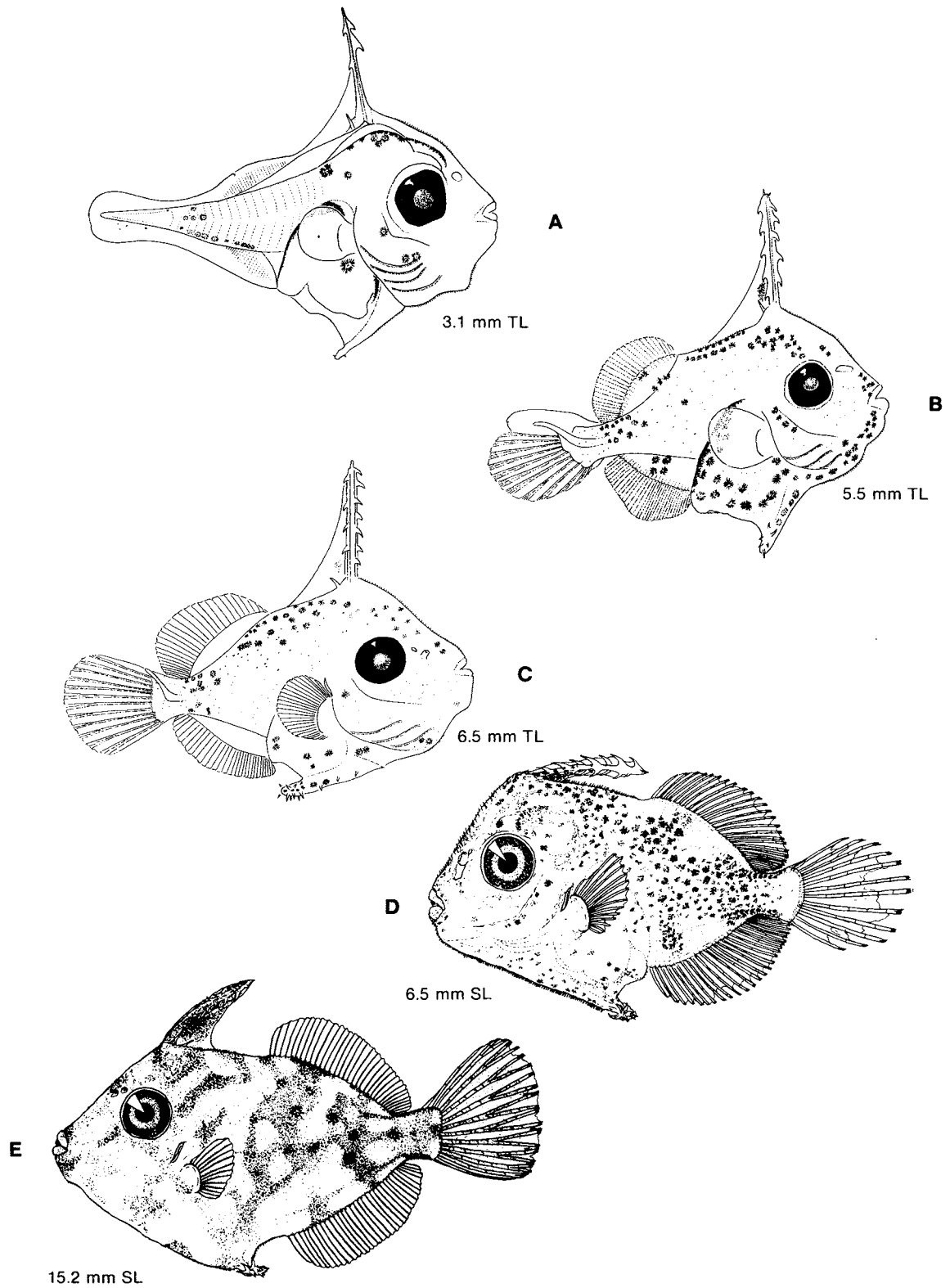
**Note:** Filefishes have 1 large dorsal spine and many dorsal and anal rays; triggerfishes have 3 dorsal spines (1 large) and fewer dorsal and anal rays.

**Dorsal and Anal Fin-ray Counts for Western  
 North Atlantic Filefishes**

Species	Dorsal	Anal
<i>Monacanthus hispidus</i> (Linnaeus)	29-35	28-35
<i>Monacanthus setifer</i> Bennett	27-30	26-30
<i>Monacanthus ciliatus</i> (Mitchill)	29-37	28-36
<i>Monacanthus tuckeri</i> Bean	32-37	31-36
<i>Cantherhines pullus</i> (Ranzani)	33-37	29-32
<i>Aluterus schoepfi</i> (Walbaum)	32-39	35-41
<i>Aluterus heudeloti</i> Hollard	36-41	39-44
<i>Aluterus scriptus</i> (Osbeck)	43-49	46-52
<i>Aluterus monoceros</i> (Linnaeus)	46-50	47-52

*Monacanthus hispidus*

BALISTIDAE



A-C (eastern Atlantic material)

**TETRAODONTIDAE** *Sphoeroides maculatus* (Bloch and Schneider)**Spawning:** Spring-summer.

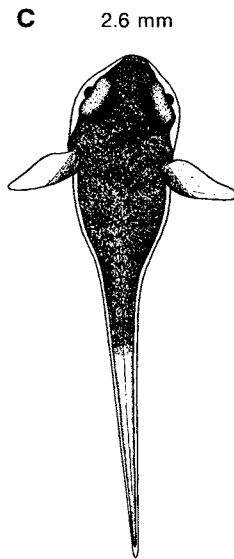
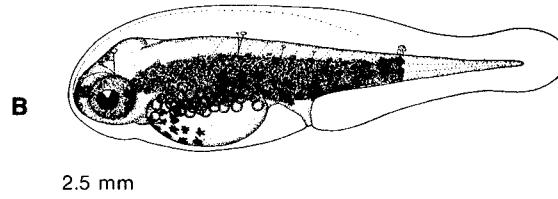
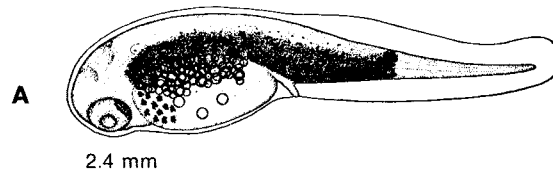
- Eggs**
- Spherical, demersal, adhesive.
  - Diameter: 0.85-0.91 mm.
  - Shell: reticulated.
  - Oil globules: many.

- Larvae**
- Hatching occurs at about 2.4 mm, eyes unpigmented.
  - Chunky body, with low number of myomeres.
  - Small tubercles present over body.
  - Fin rays complete at 7.4 mm.
  - Caudal fin-ray count unique; rays last to form (unusual in teleost larvae).
  - No pelvic fin.
  - Heavily pigmented except last one-third of body.

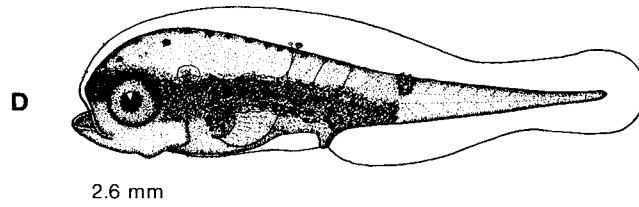
**Meristic features**

Myomeres: 19  
 Vert : 8+11  
 D : 8  
 A : 7  
 Piv : None  
 P : 15-16  
 C : 0+5+6+0

***Sphoeroides maculatus* TETRAODONTIDAE**



Dorsal



Small opercle spine present

