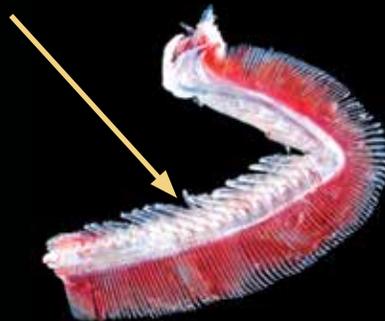




**Southern Flounder**



**Summer Flounder**



**Gulf Flounder**

**8-11 short, stubby gill rakers**

Fish with no ocellated spots, and short, stubby gill rakers are southern flounder

**13 or more long, thin gill rakers**

Fish with ocellated spots and long, thin gill rakers are summer flounder

**9-12 short, stubby gill rakers**

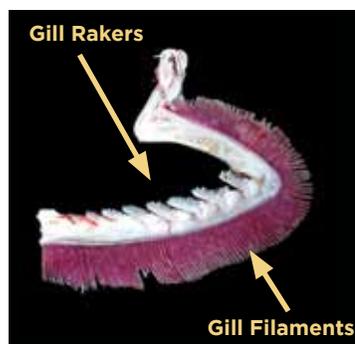
Fish with ocellated spots and short, stubby gill rakers are gulf flounder

**Why do we need to identify flounder?**

The N.C. Division of Marine Fisheries collects information on recreational fishing catch and effort through in-person and mail surveys. Staff talk to more than 20,000 anglers each year on the beach, at the piers and at boat ramps to find out what they caught, what they threw back, where and how long they fished and other information. Anglers who are able to identify the species of flounder caught will help scientists better understand the status of these fish stocks and how to manage the recreational flounder fishery.

**What are gill rakers?**

Gill rakers are bony protrusions that extend outward from the gill arch. They appear in this image as white finger like projections on the top of the gill arch. They are used differently in various fish species, depending on their feeding habits. In flounder, they work to guide baitfish into the esophagus and to protect the gill filaments from damage. Gill filaments are the thin, red projections on the bottom of the gill arch. Gill filaments are used in gas exchange, and are red with blood.



**What about spots?**



Ocellated or "eye" spot (Summer & gulf flounder)



Non-ocellated spot (Southern flounder)



**N.C. Division of Marine Fisheries**  
<http://portal.ncdenr.org/web/mf/>  
<http://hcrecfish.com/>  
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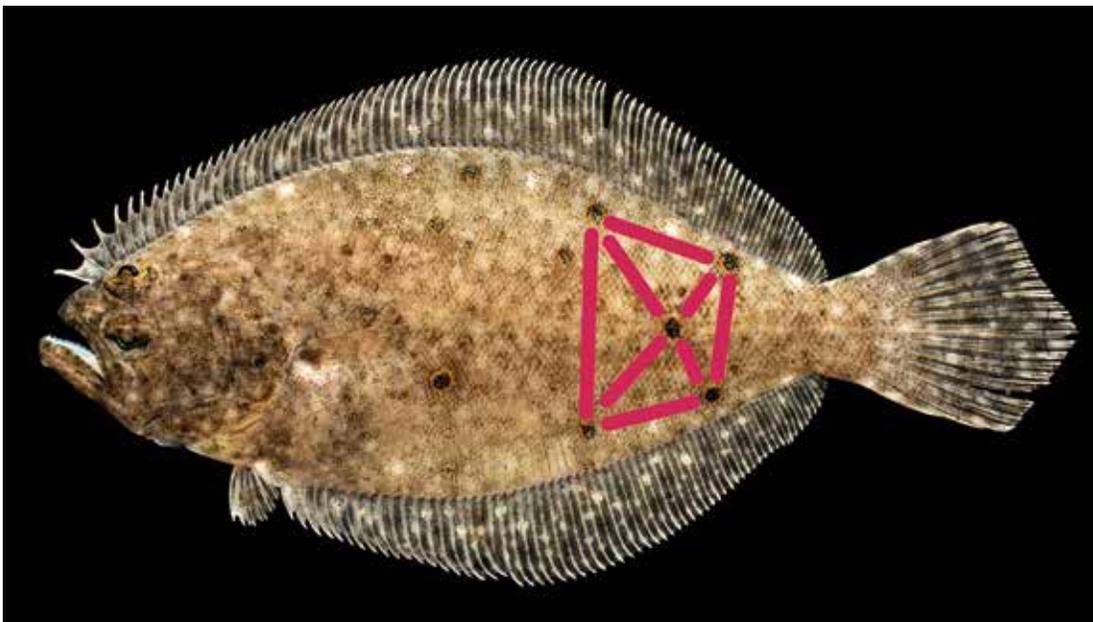
**Flounder**  
Identification Guide



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### Southern Flounder

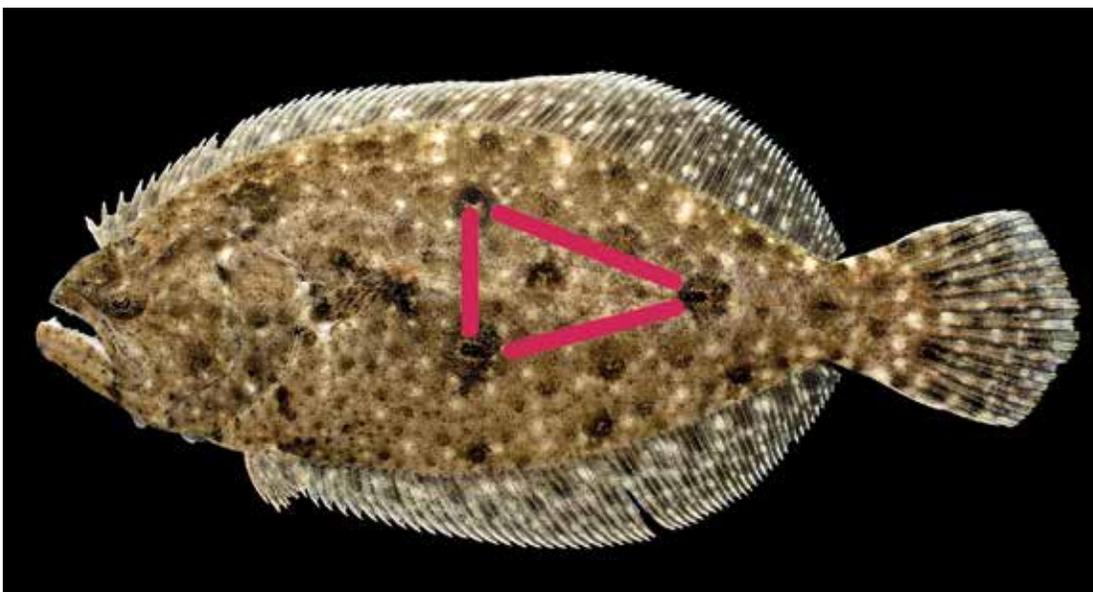
- Most common flounder caught in N.C., especially in estuarine waters
- Non-ocellated spots on body
- Upper jaw extends to beyond rear margin of eye
- Eight to 11 gill rakers on lower limb of first gill arch
- Sixty-three to 74 anal fin rays



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### Summer Flounder

- Commonly seen around inlets/ocean, and in estuarine waters
- At least five ocellated spots on body, five prominent ocelli form the pattern from the five-side of a die.
- Upper jaw extends to rear margin of eye
- Thirteen to 18 gill rakers on lower limb of first gill arch
- Sixty to 73 anal fin rays



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### Gulf Flounder

- Occasionally seen, usually in ocean waters
- Three prominent ocellated spots form triangle on body, apex towards caudal fin (can have more than three over entire body, but three will be prominent)
- Upper jaw extends beyond rear margin of eye
- Nine to 12 gill rakers on lower limb of first gill arch
- Fifty-six to 63 anal fin rays