

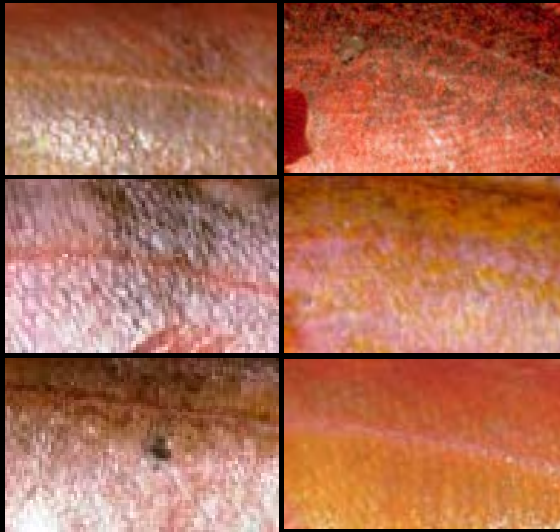
# Rockfish Lecture



3-week Observer Training

# Step 1: Color Category

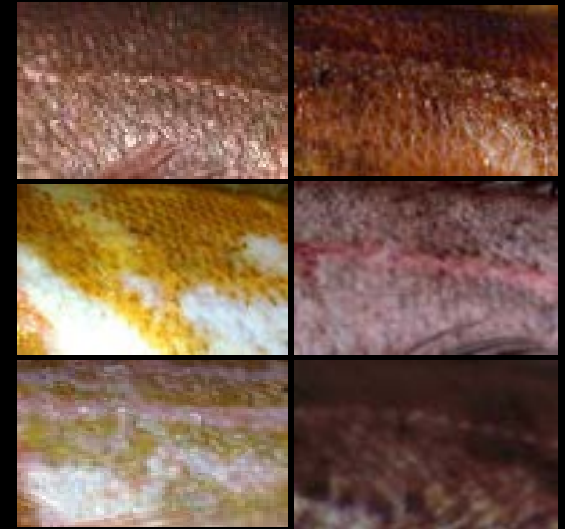
**Red**



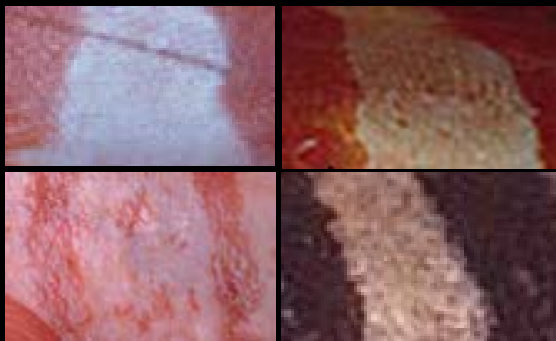
**Black**



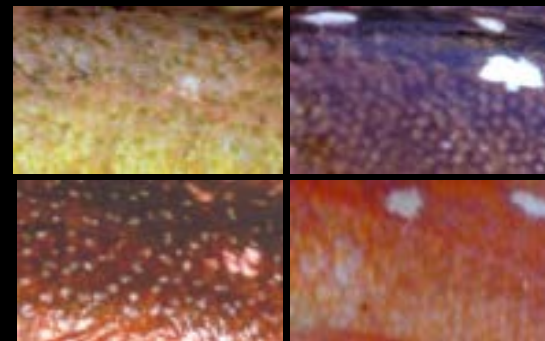
**(neither) Red/  
(nor) Black**



**Banded**



**White spotted red**



# Step 2: Head Spine Strength

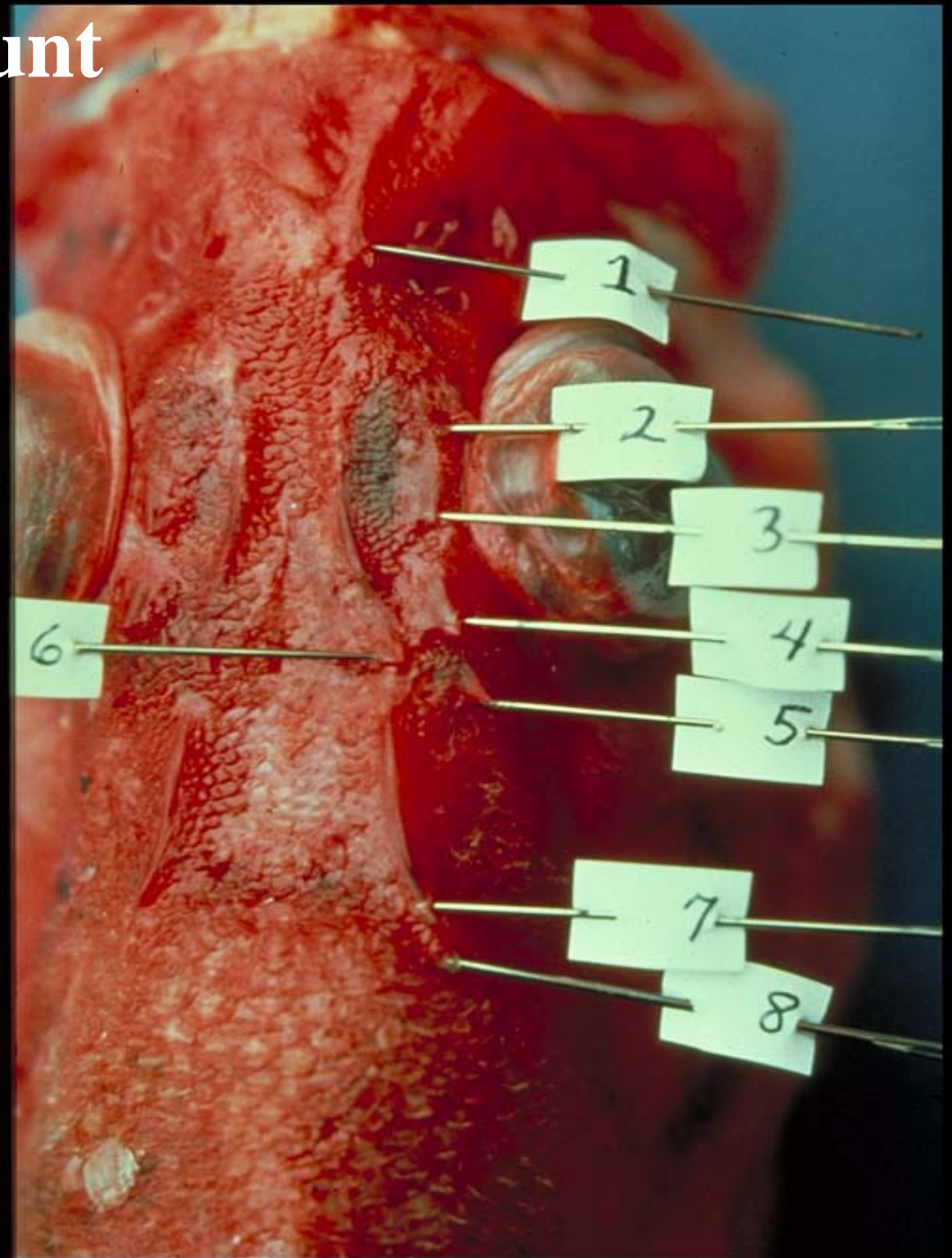
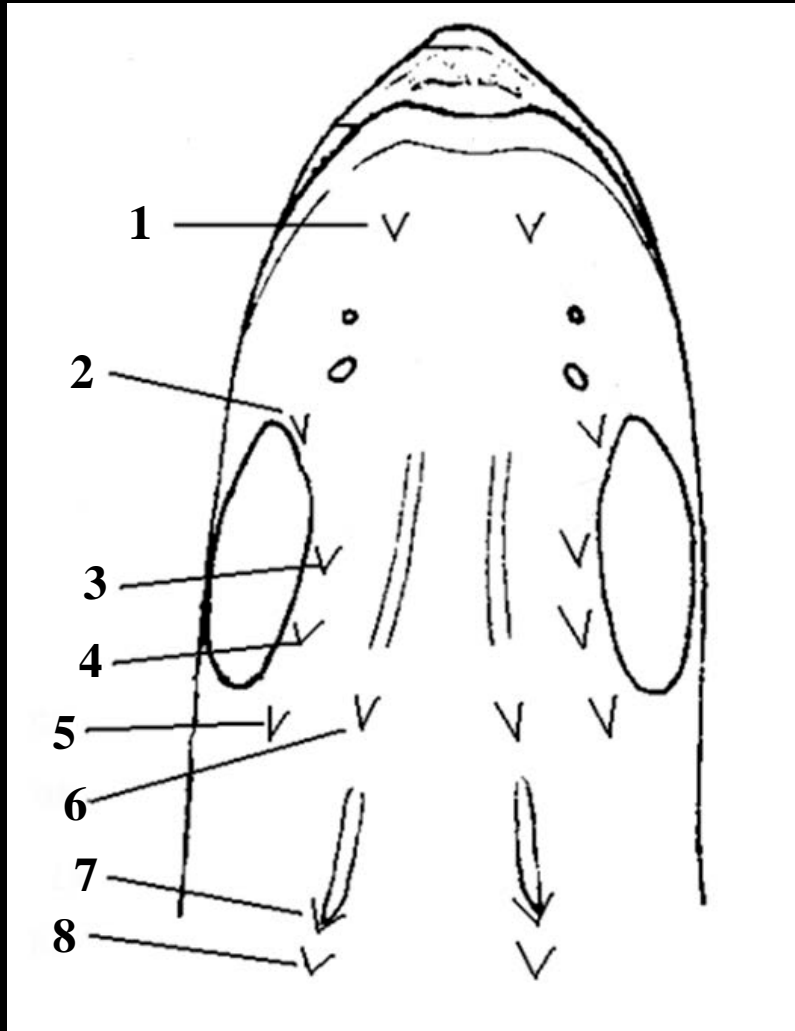
Weak



Strong

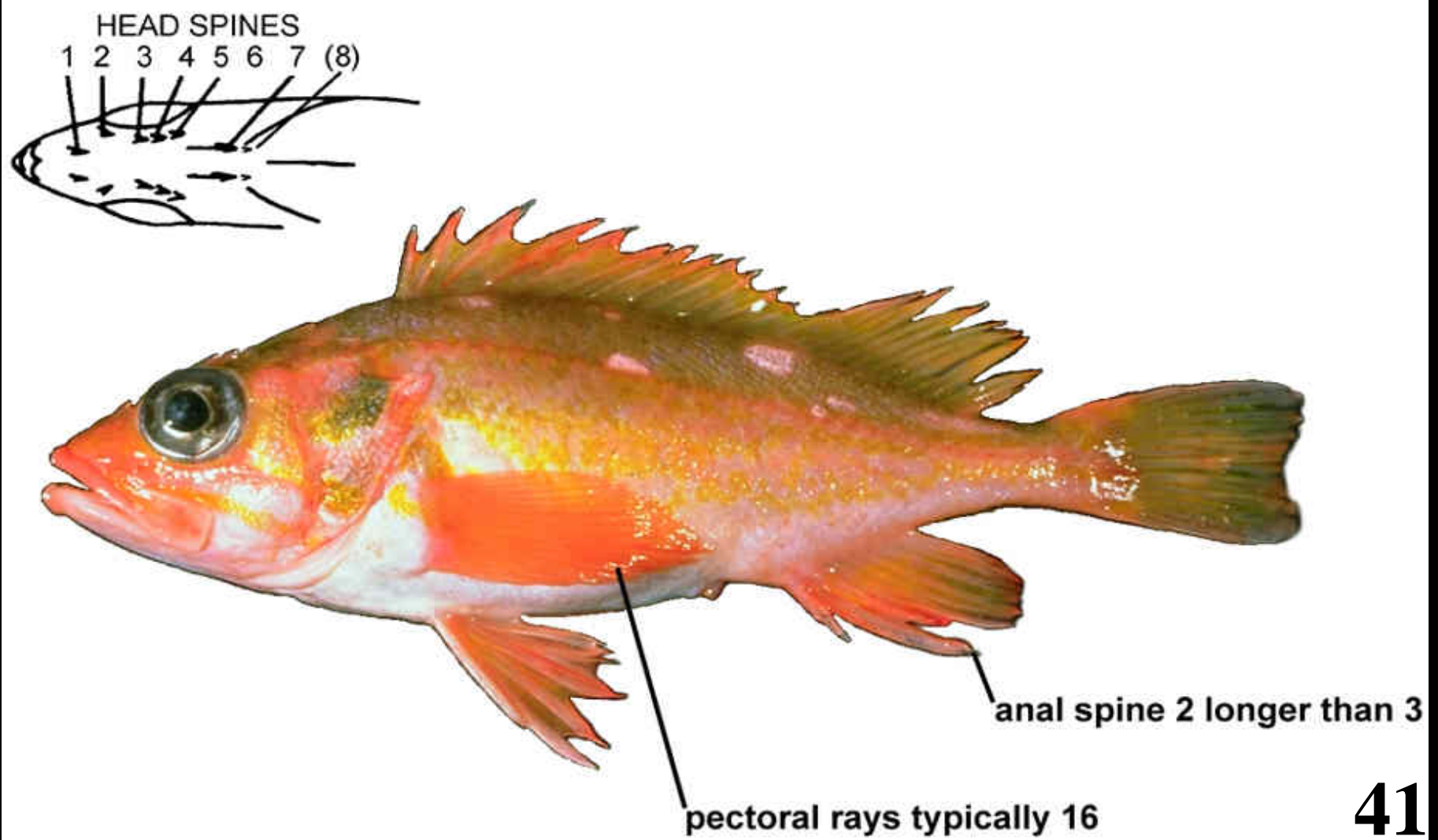


# Step 3: Head Spine Count



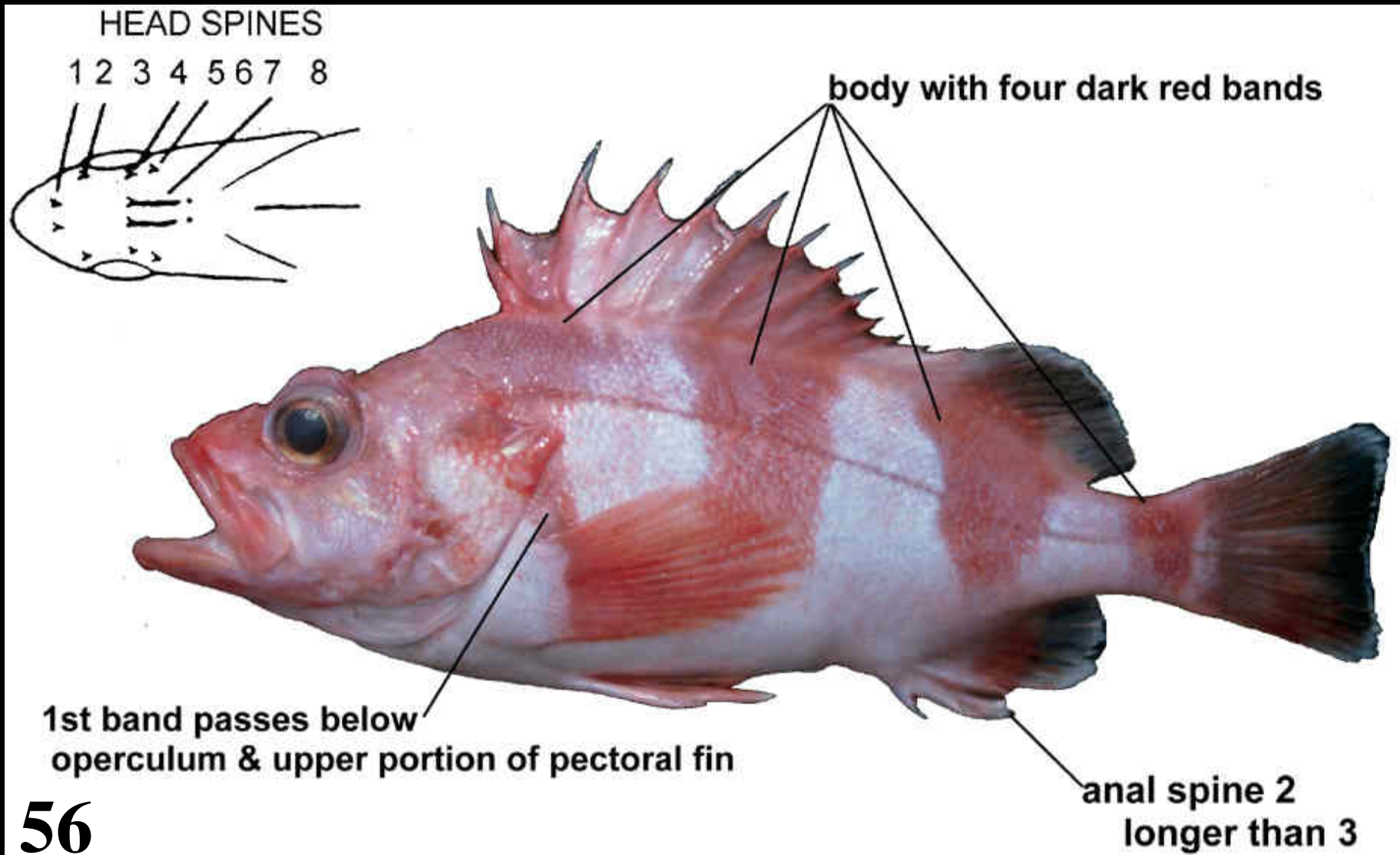
- 1. Banded & Spotted Category**
- 2. Red Category**
- 3. Black Category**
- 4. Red/Black Category**
- 5. Others**

# *Sebastes helvomaculatus*



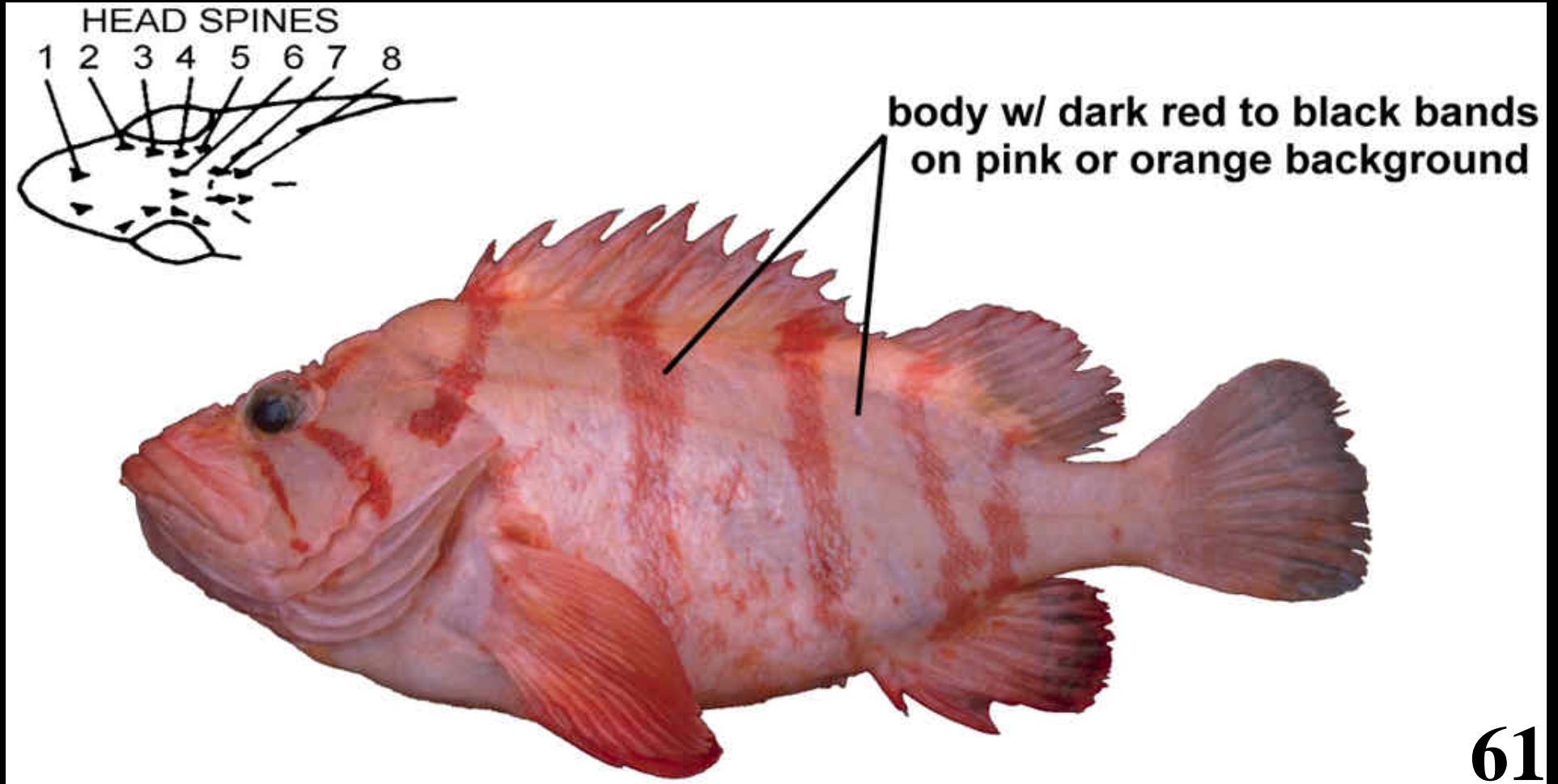
Rosethorn rockfish

# *Sebastes babcocki*



Redbanded rockfish

# *Sebastes nigrocinctus*



Tiger rockfish



# **Banded & Spotted Category**

## **Red Category**

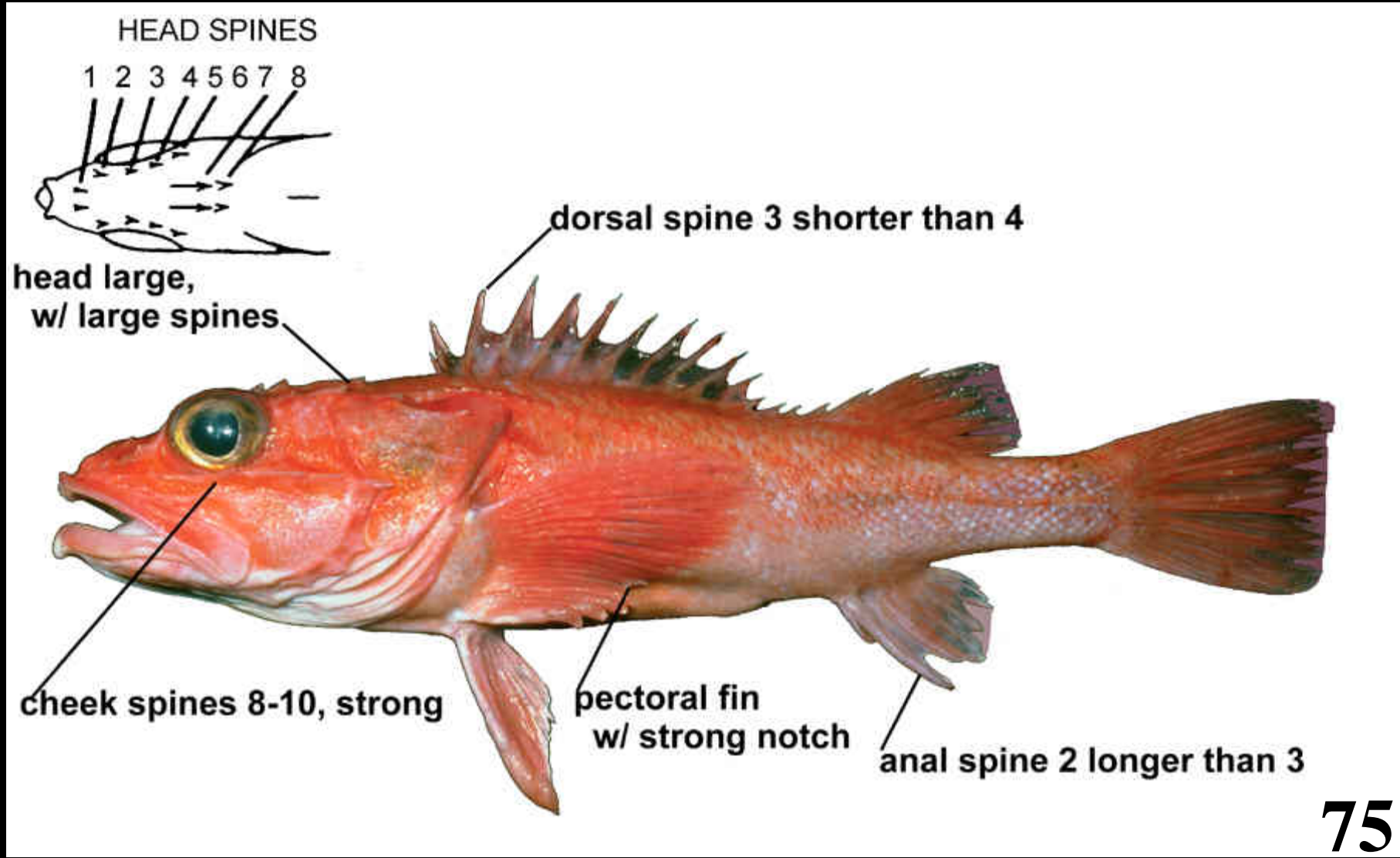
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

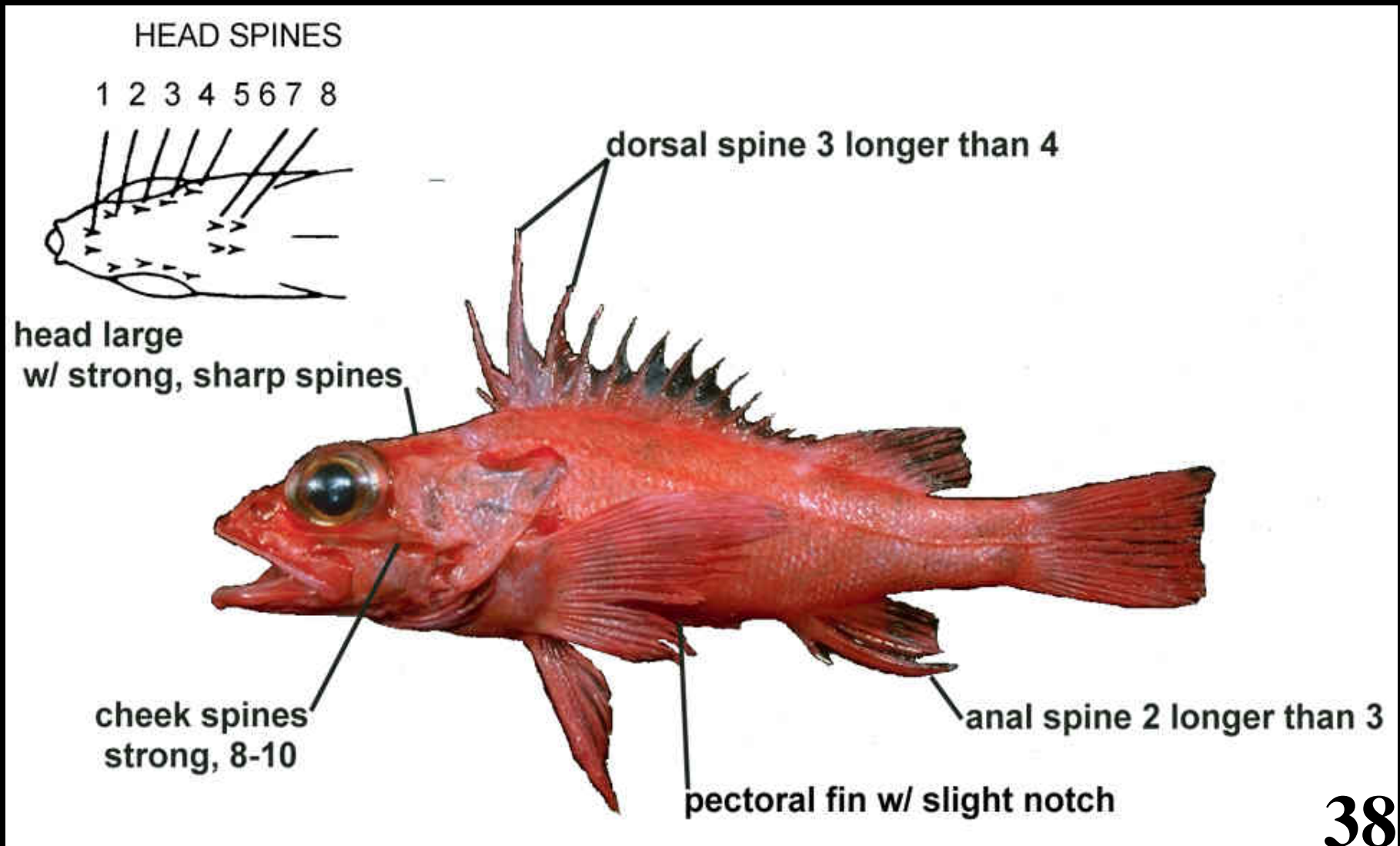
## **Others**

# *Sebastolobus alascanus*



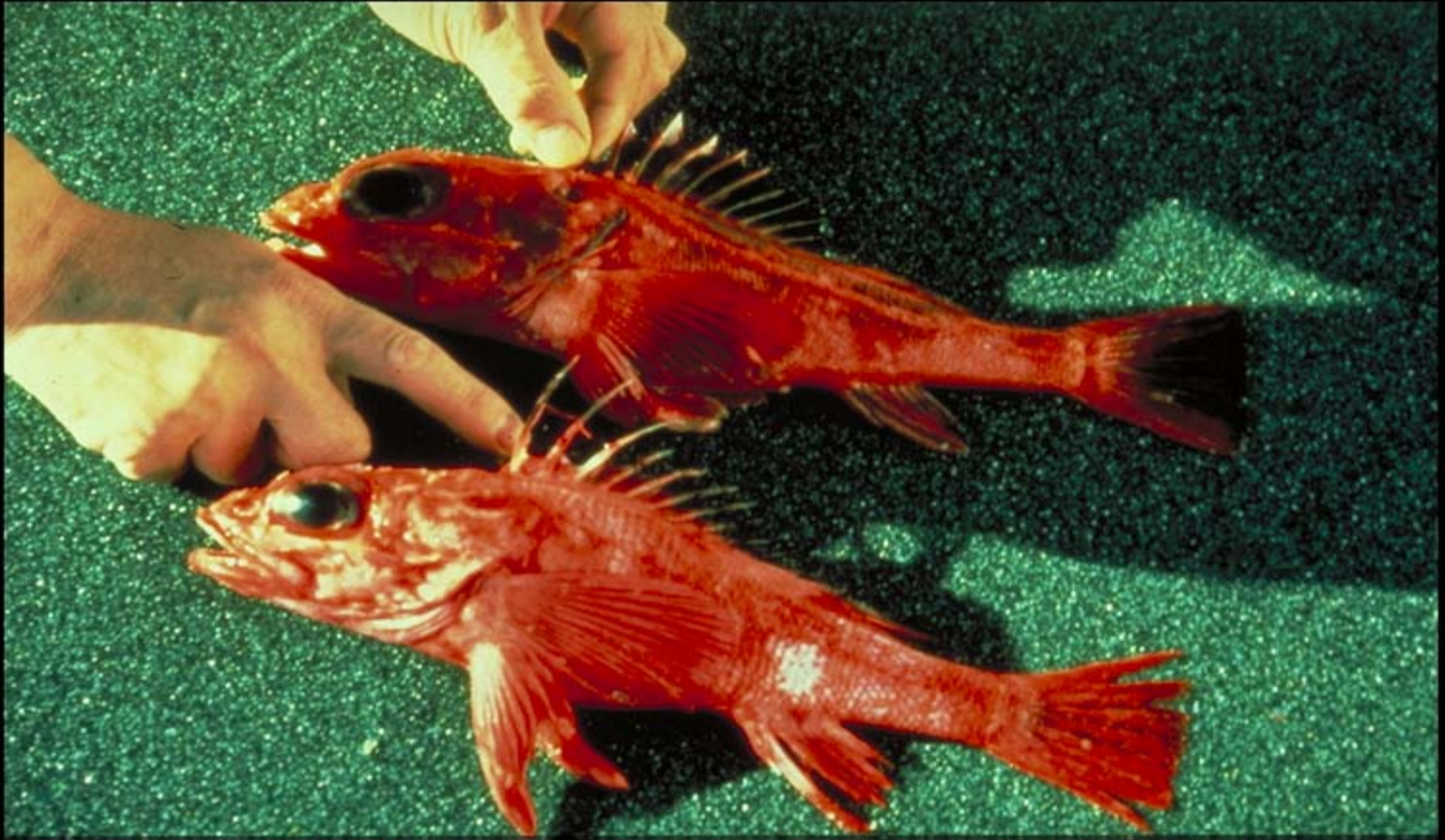
Shortspine thornyhead

# *Sebastolobus altivelis*



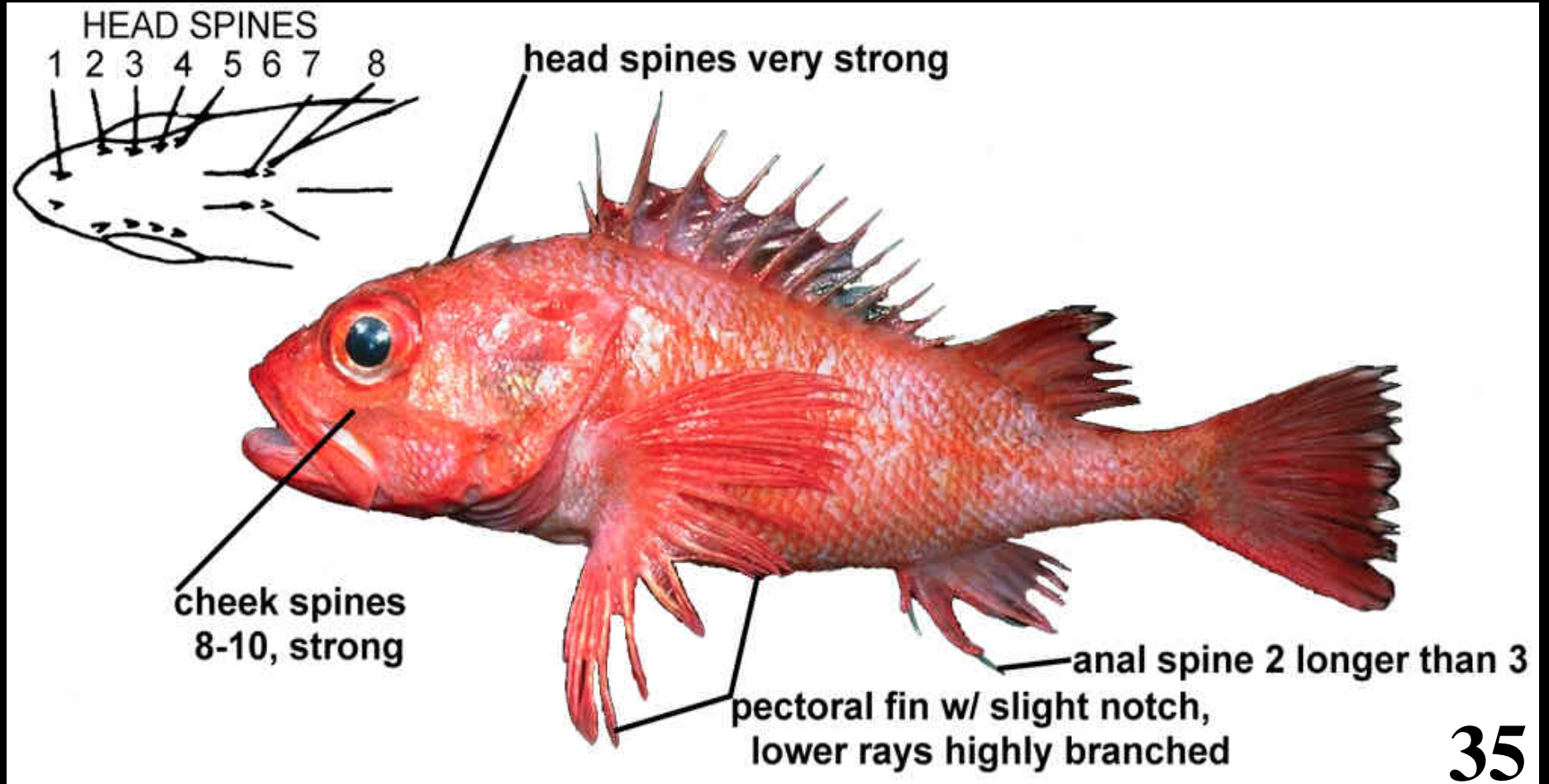
Longspine thornyhead

*S. alascanus* (Shortspine)



*S. altivelis* (Longspine)

# *Sebastolobus macrochir*

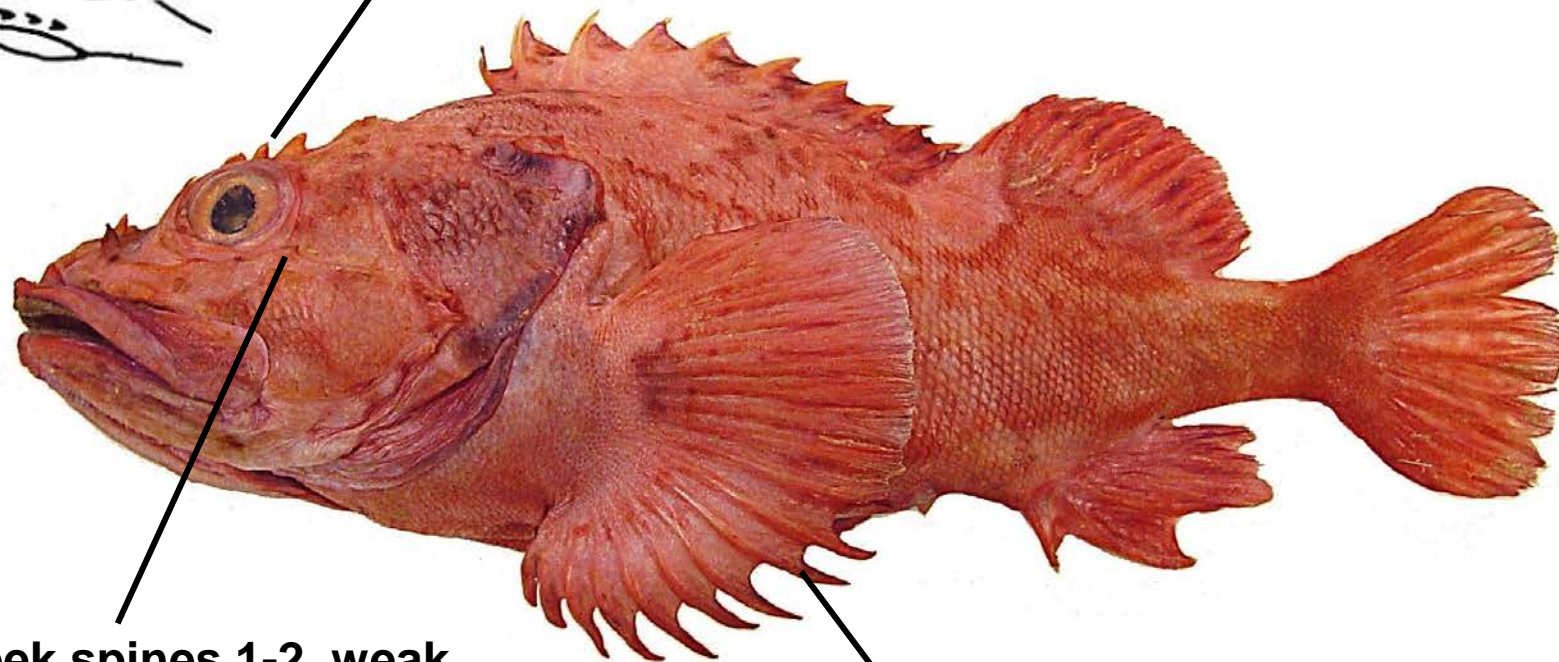


Broadbanded thornyhead

# *Adelosebastes latens*



**head spines very strong**



**cheek spines 1-2, weak**

**lower pectoral rays fleshy,  
free at tips**

**41**

**Aleutian scorpionfish**

# **Banded & Spotted Category**

## **Red Category**

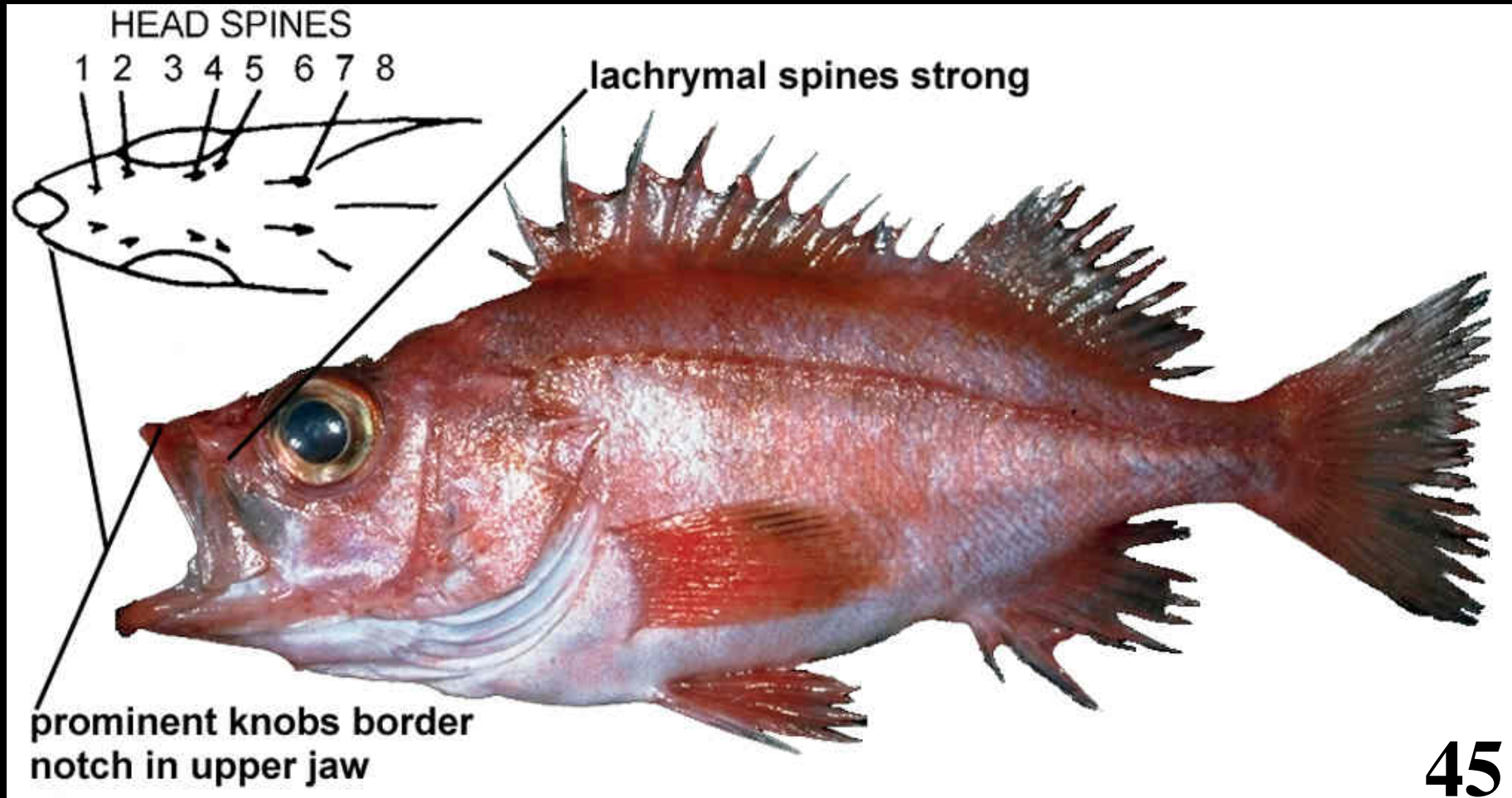
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

## **Others**

*Sebastes diploproa*



Splitnose rockfish



*Sebastes diploproa*



Splitnose rockfish

# **Banded & Spotted Category**

## **Red Category**

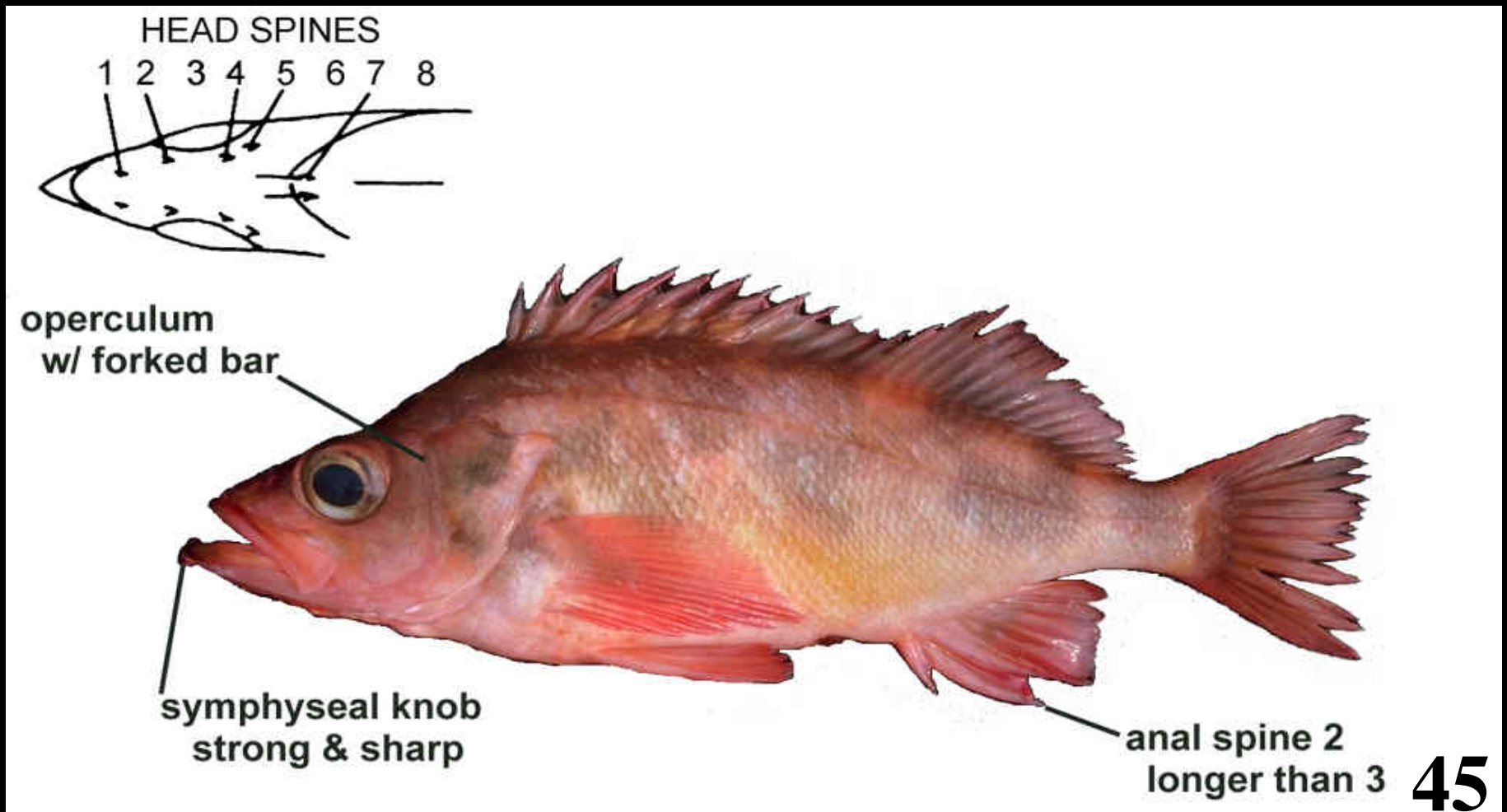
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

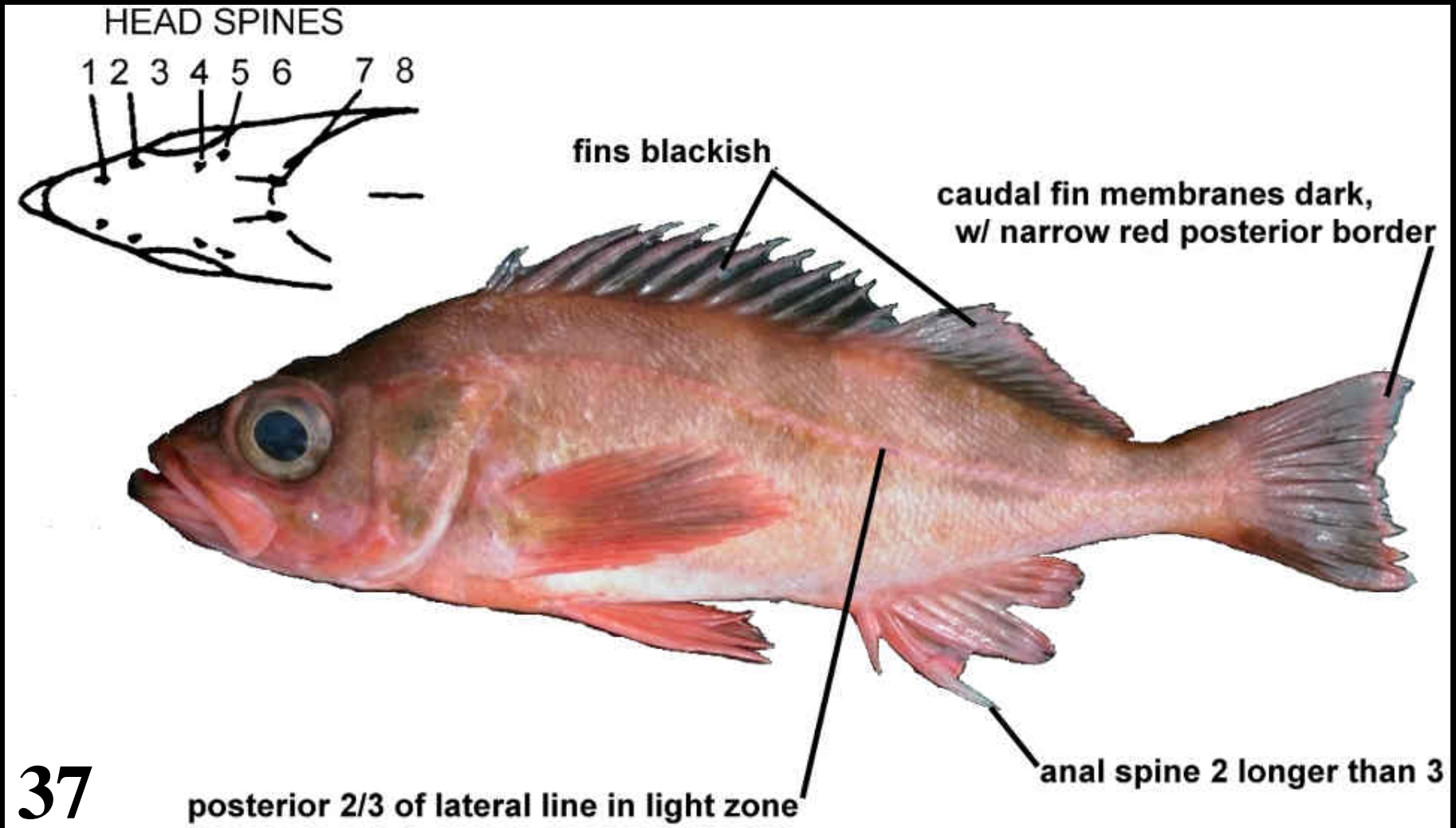
## **Others**

# *Sebastes zacentrus*



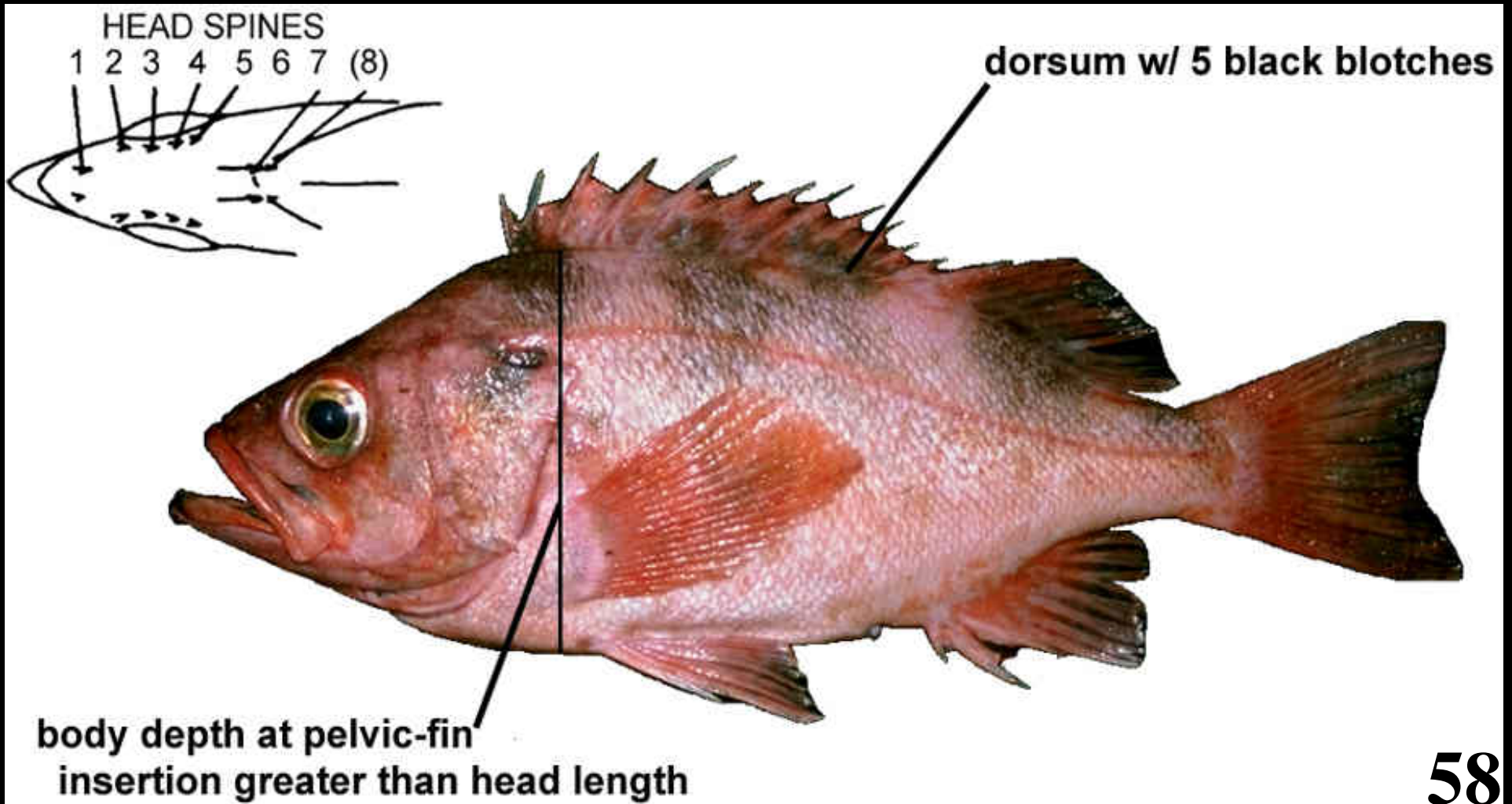
Sharpchin rockfish

# *Sebastes variegatus*

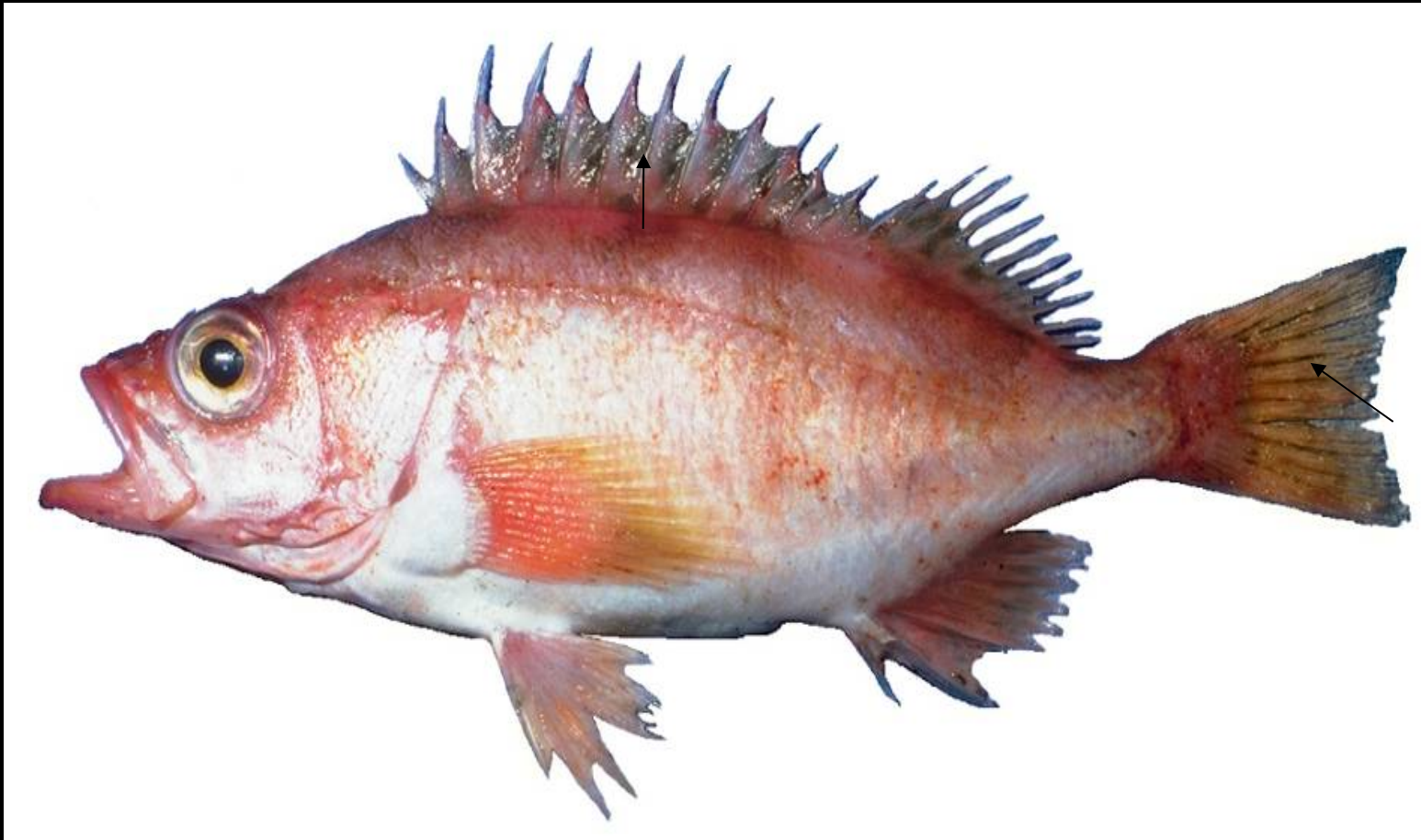


Harlequin rockfish

# *Sebastes crameri*



Darkblotched rockfish



**Stripetail RF (*S. saxicola*)\***

# **Banded & Spotted Category**

## **Red Category**

- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

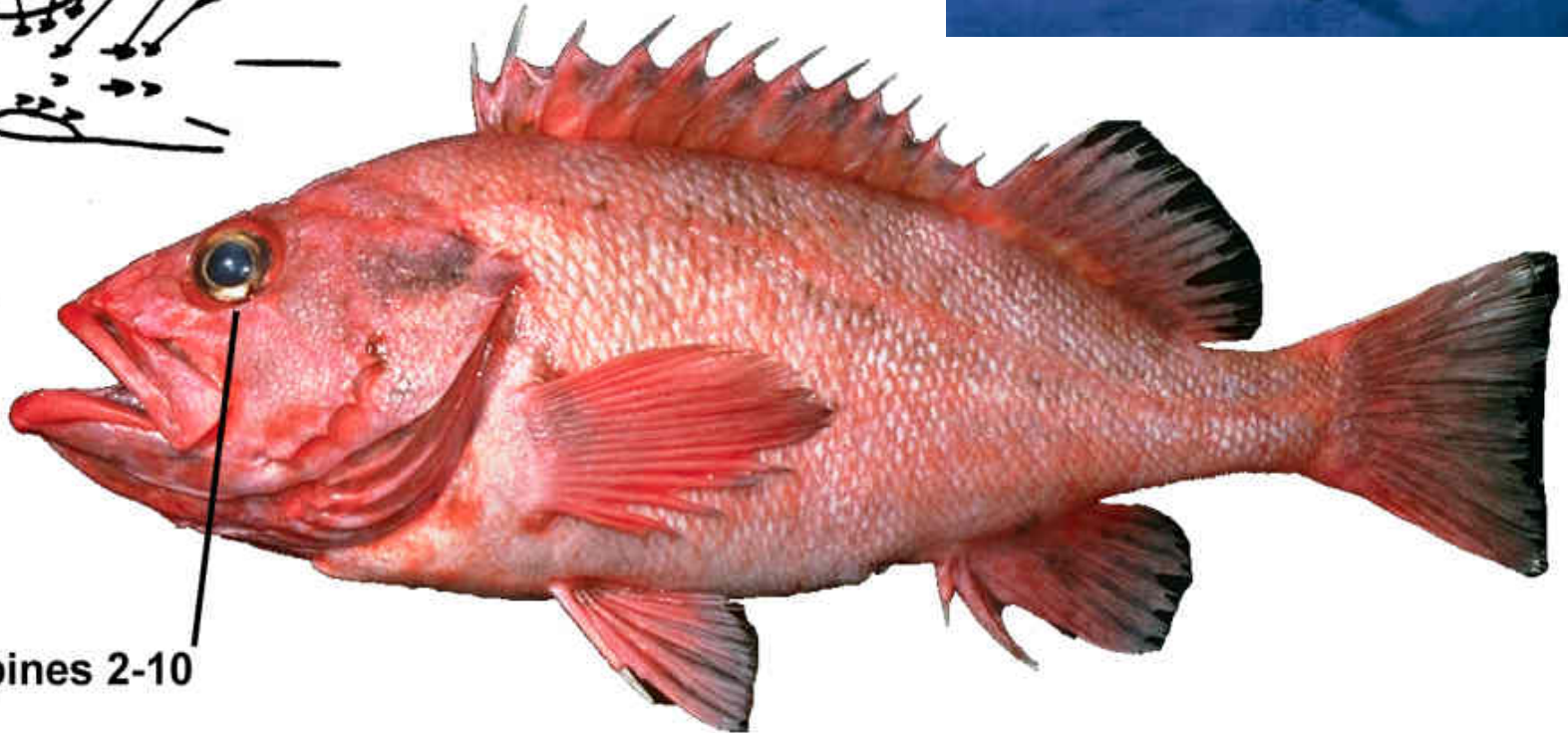
## **Others**

*Sebastes aleutianus*



HEAD SPINES

1 2 3 4 5 6 7 8



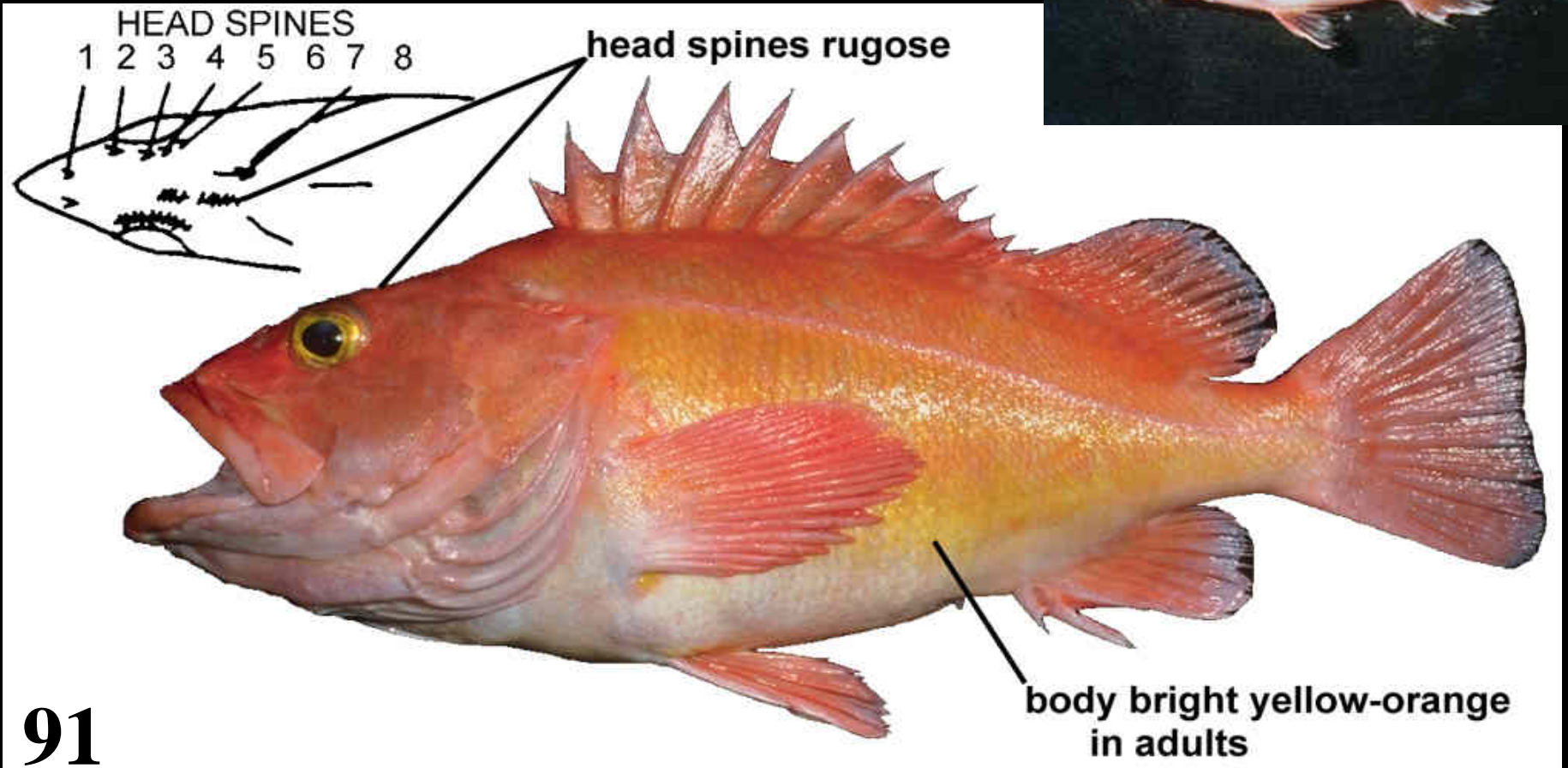
orbital spines 2-10

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Rougheye rockfish



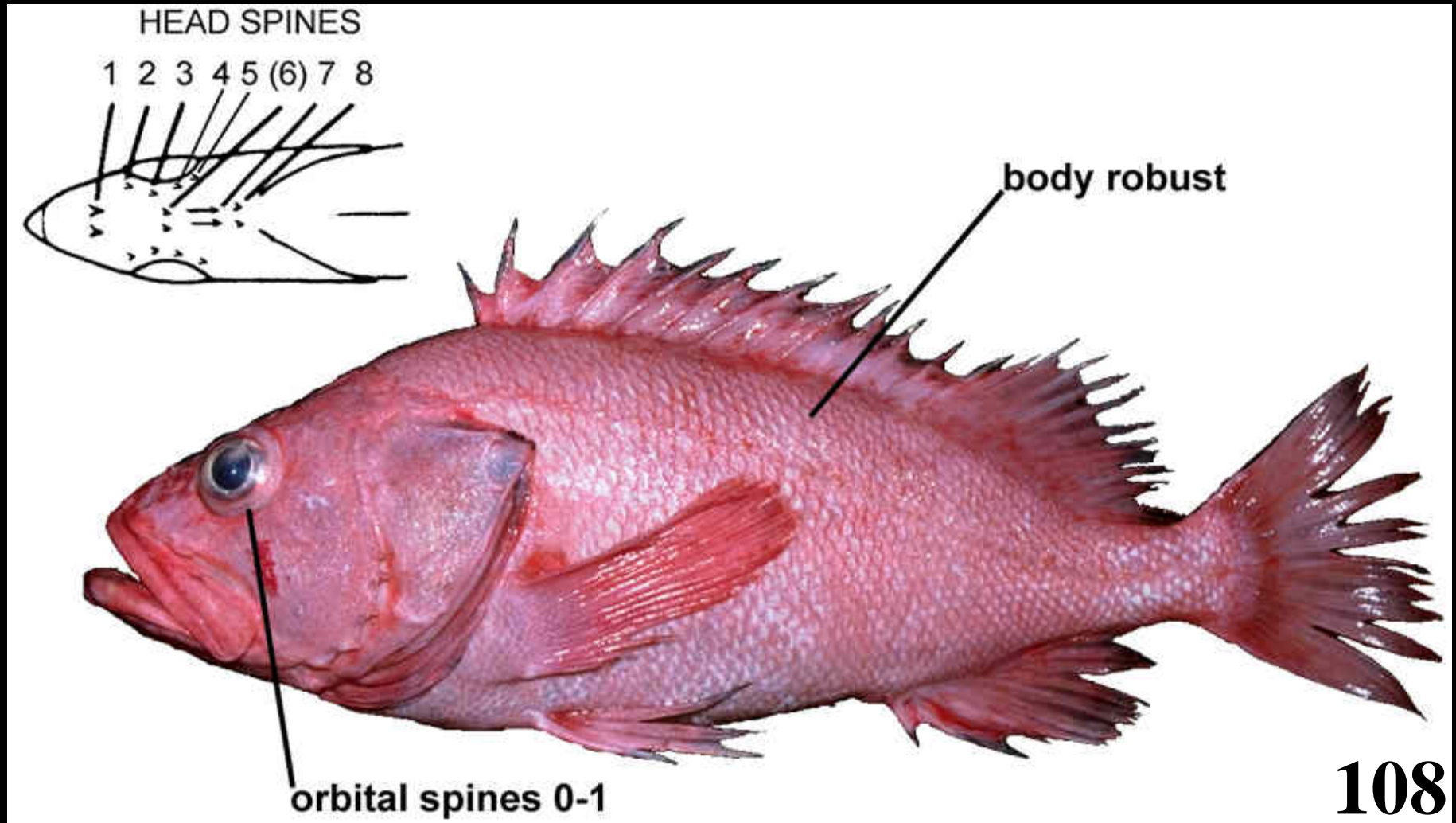
*Sebastes ruberrimu*



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Yelloweye rockfish

# *Sebastes borealis*



Shortraker rockfish

*S. borealis*



Shortraker

*S. aleutianus*



Rougheye



Canary Rockfish



Vermillion Rockfish

# **Banded & Spotted Category**

## **Red Category**

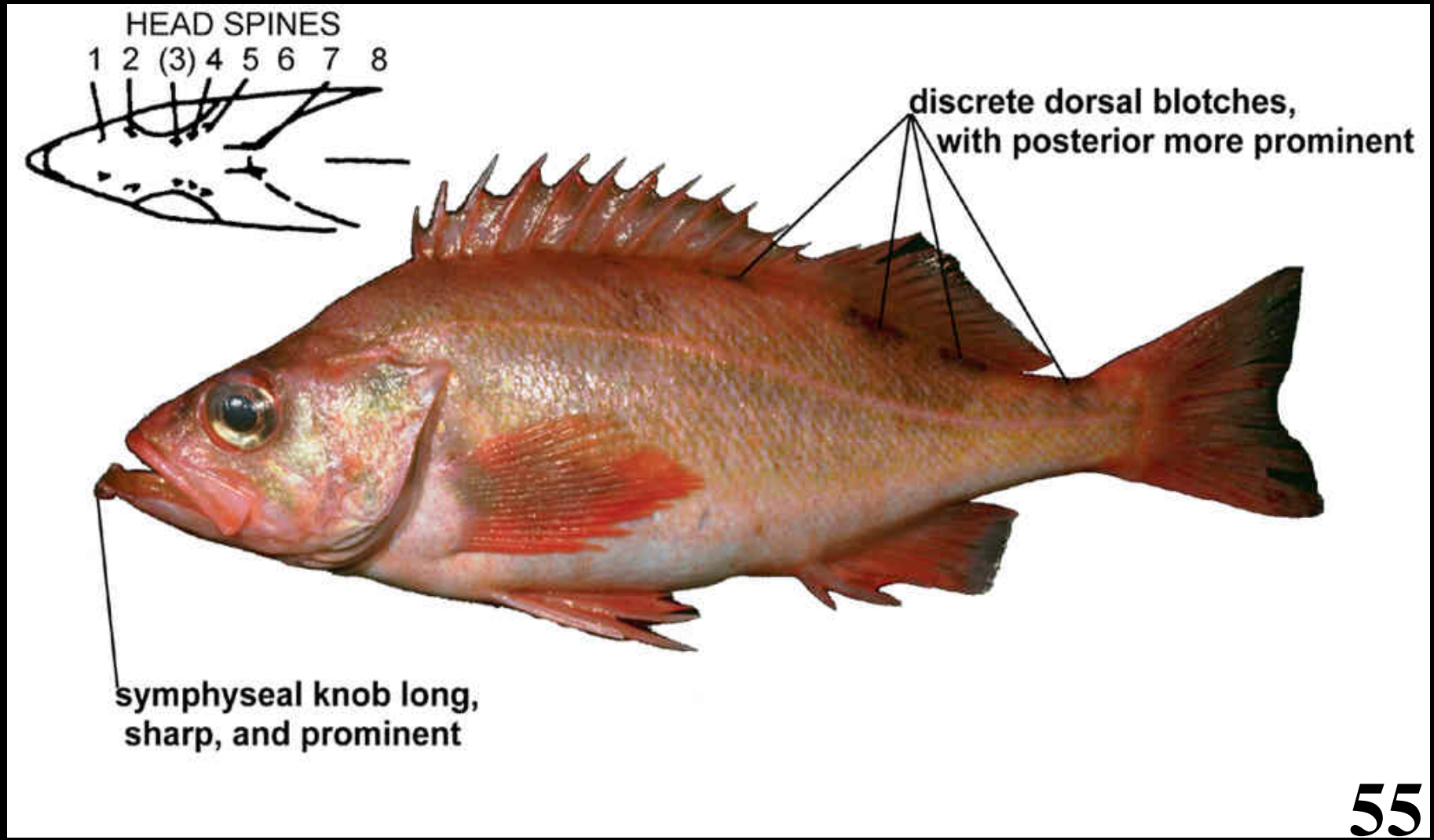
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

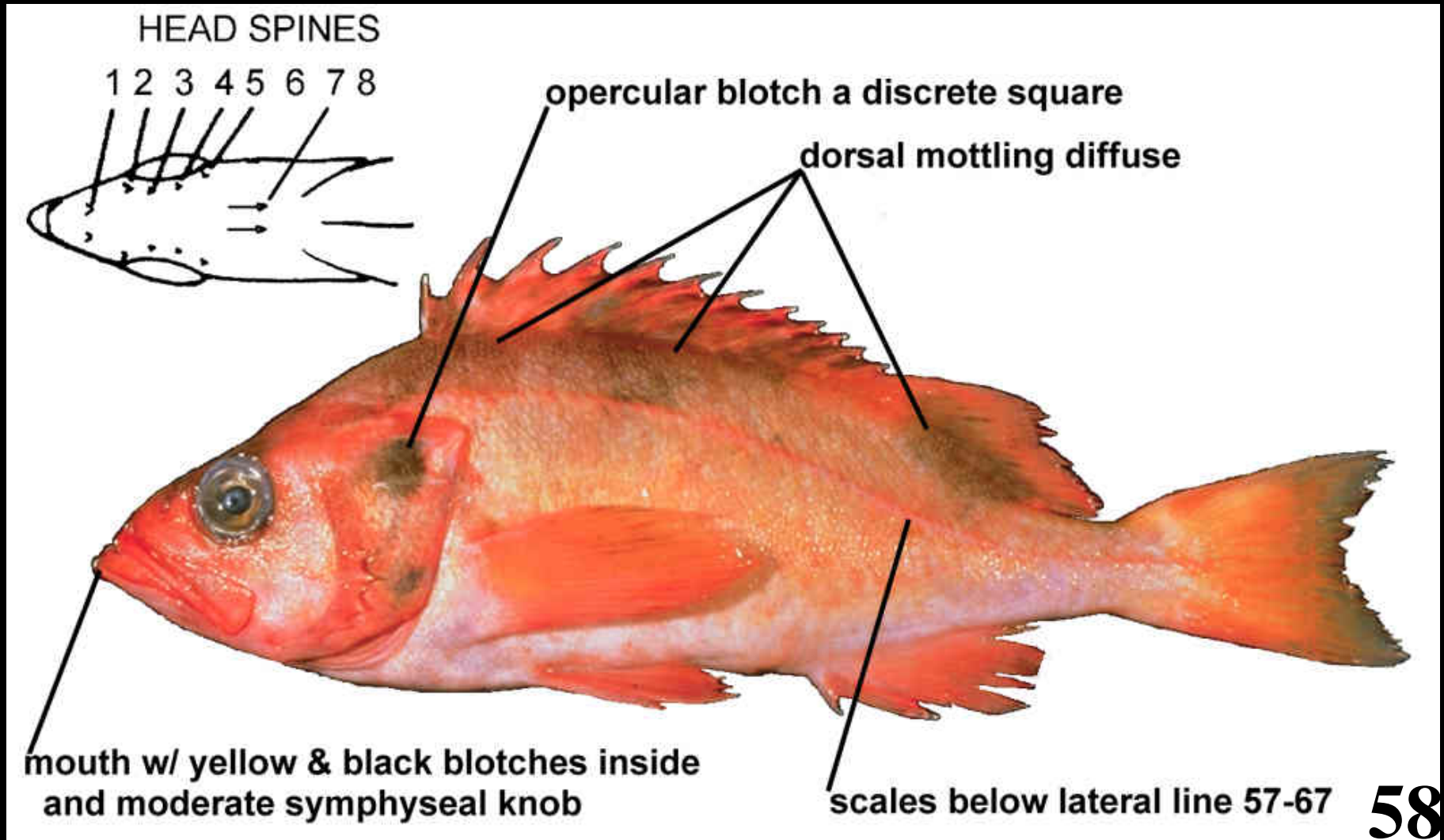
## **Others**

# *Sebastes alutus*



Pacific ocean perch

# *Sebastes reedi*



Yellowmouth rockfish



*S. reedi*

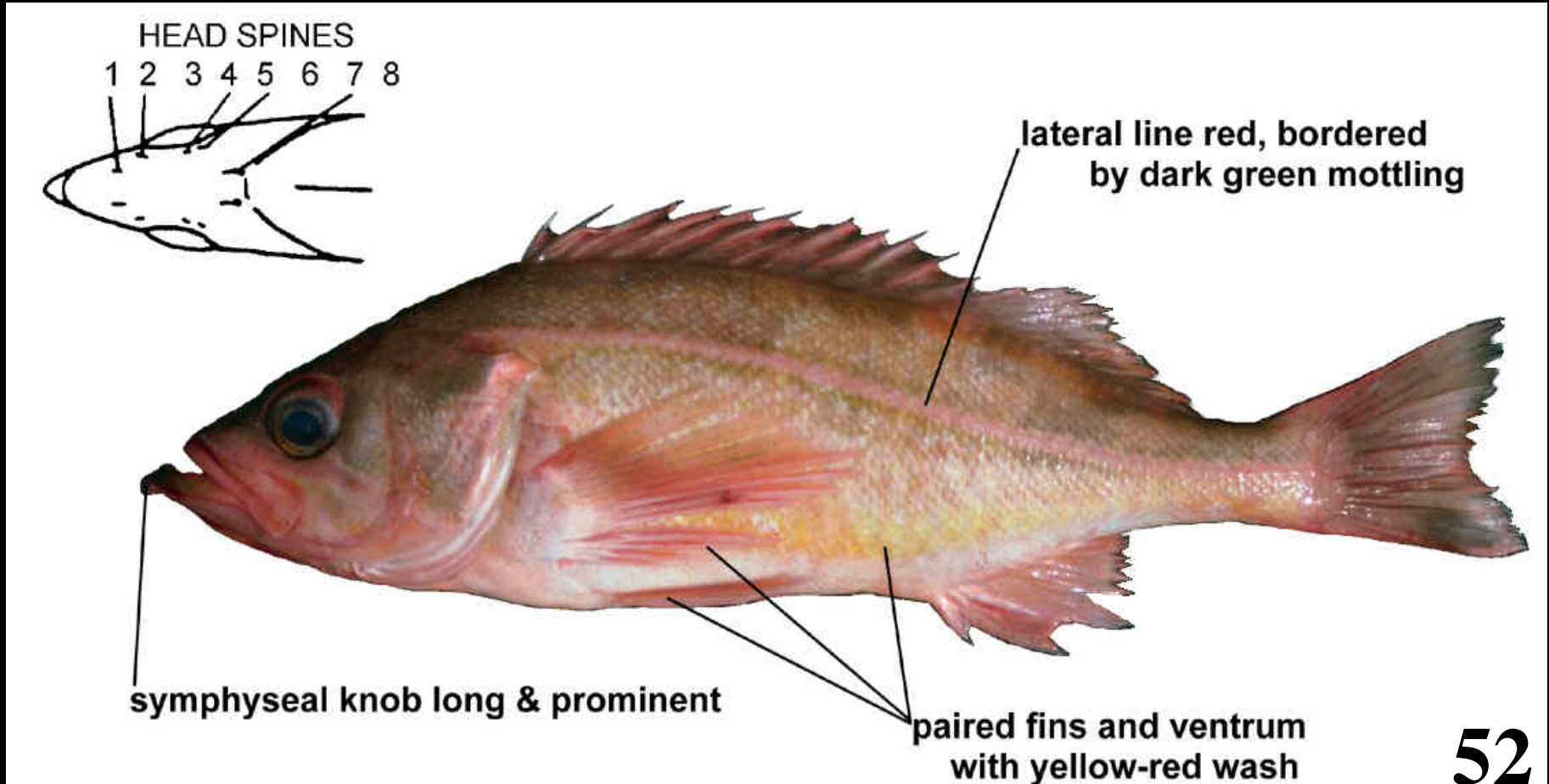
*S. alutus*



Yellowmouth

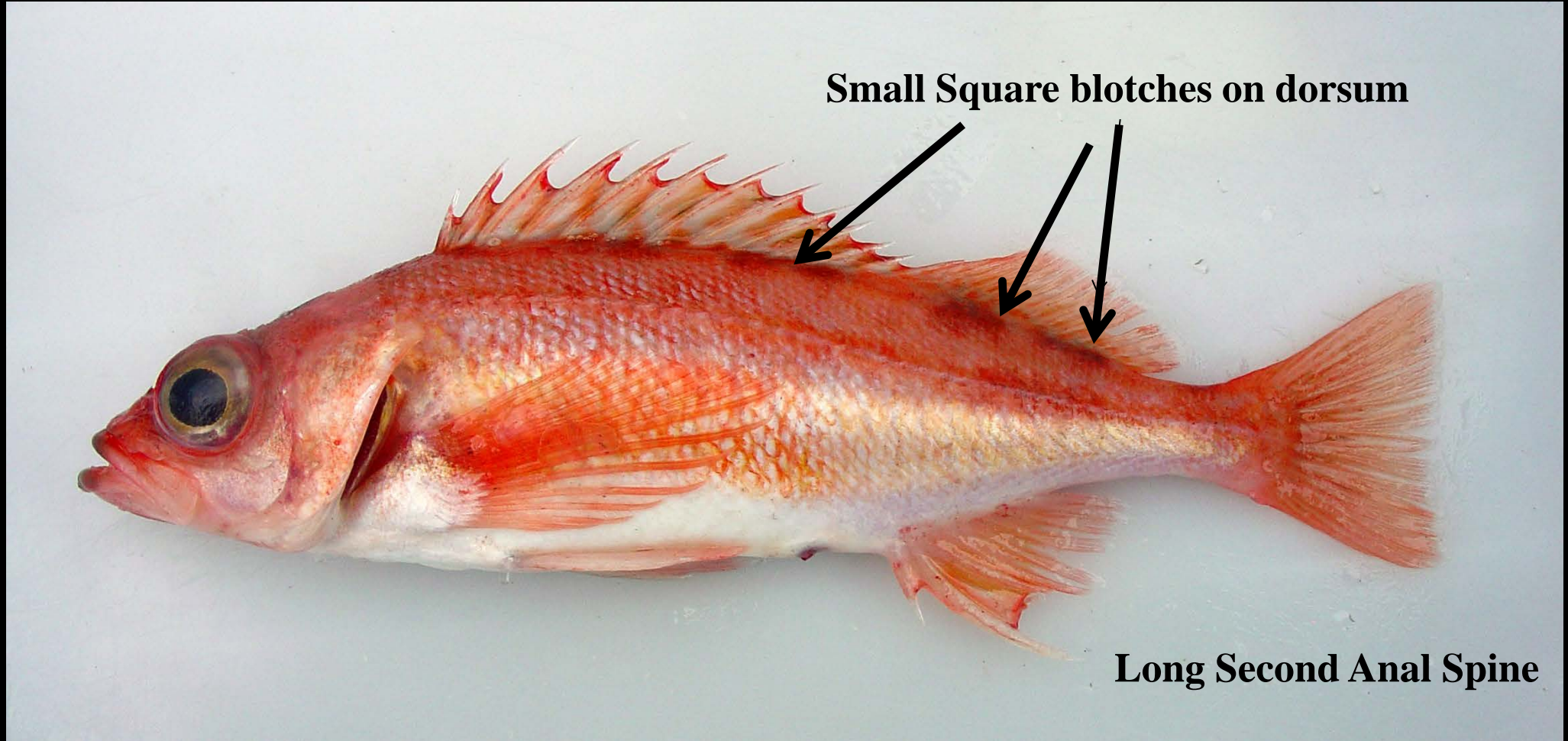
POP

# *Sebastes proriger*



Redstripe rockfish

# *Sebastes wilsoni*



Pygmy rockfish

# **Banded & Spotted Category**

## **Red Category**

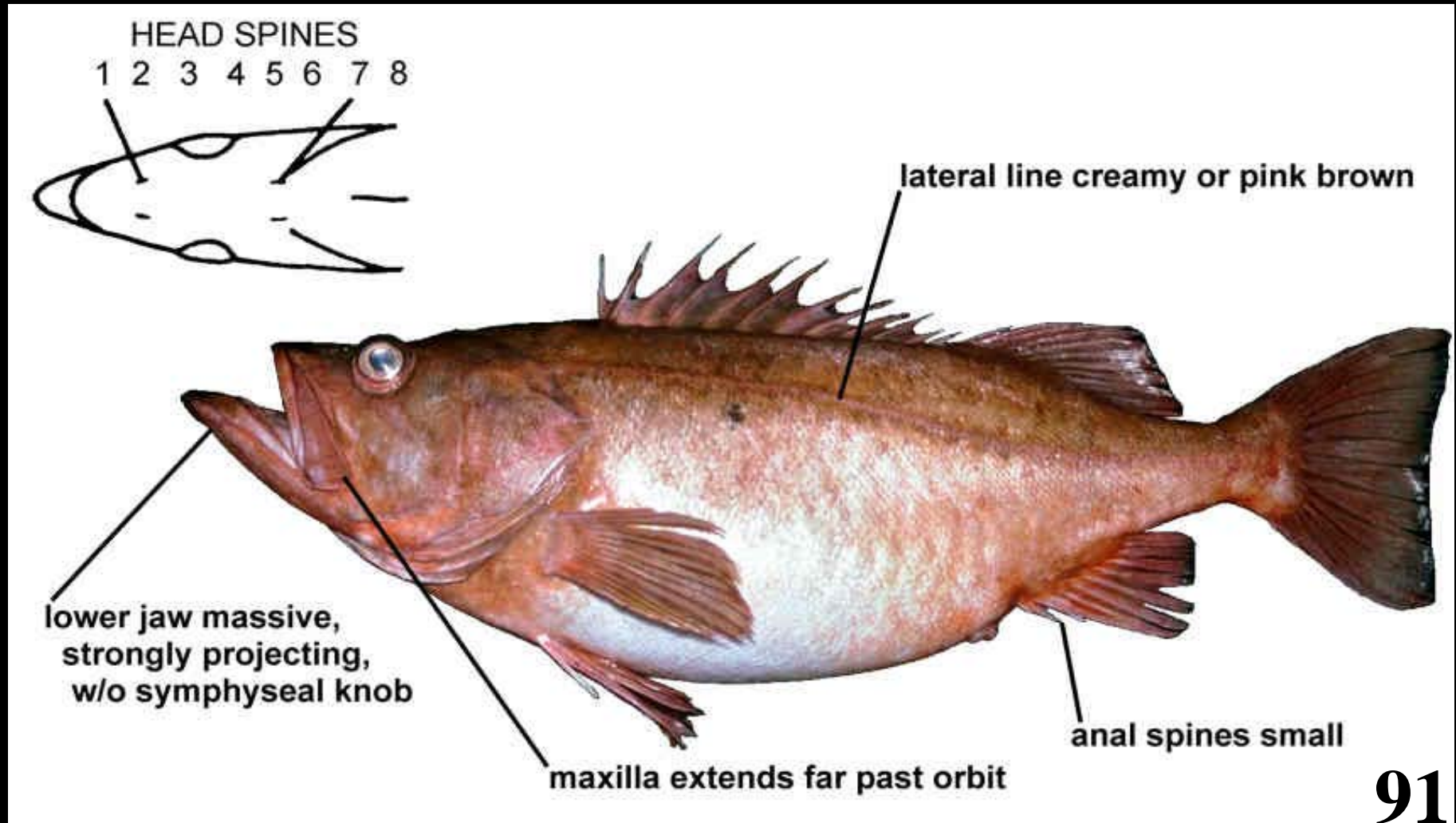
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

## **Others**

# *Sebastes paucispinis*



Boccacio



Darkblotched

Yelloweye



Harlequin



Pacific ocean perch



Redstripe



Rougheye

**Banded & Spotted Category**

**Red Category**

**Black Category**

**Red/Black Category**

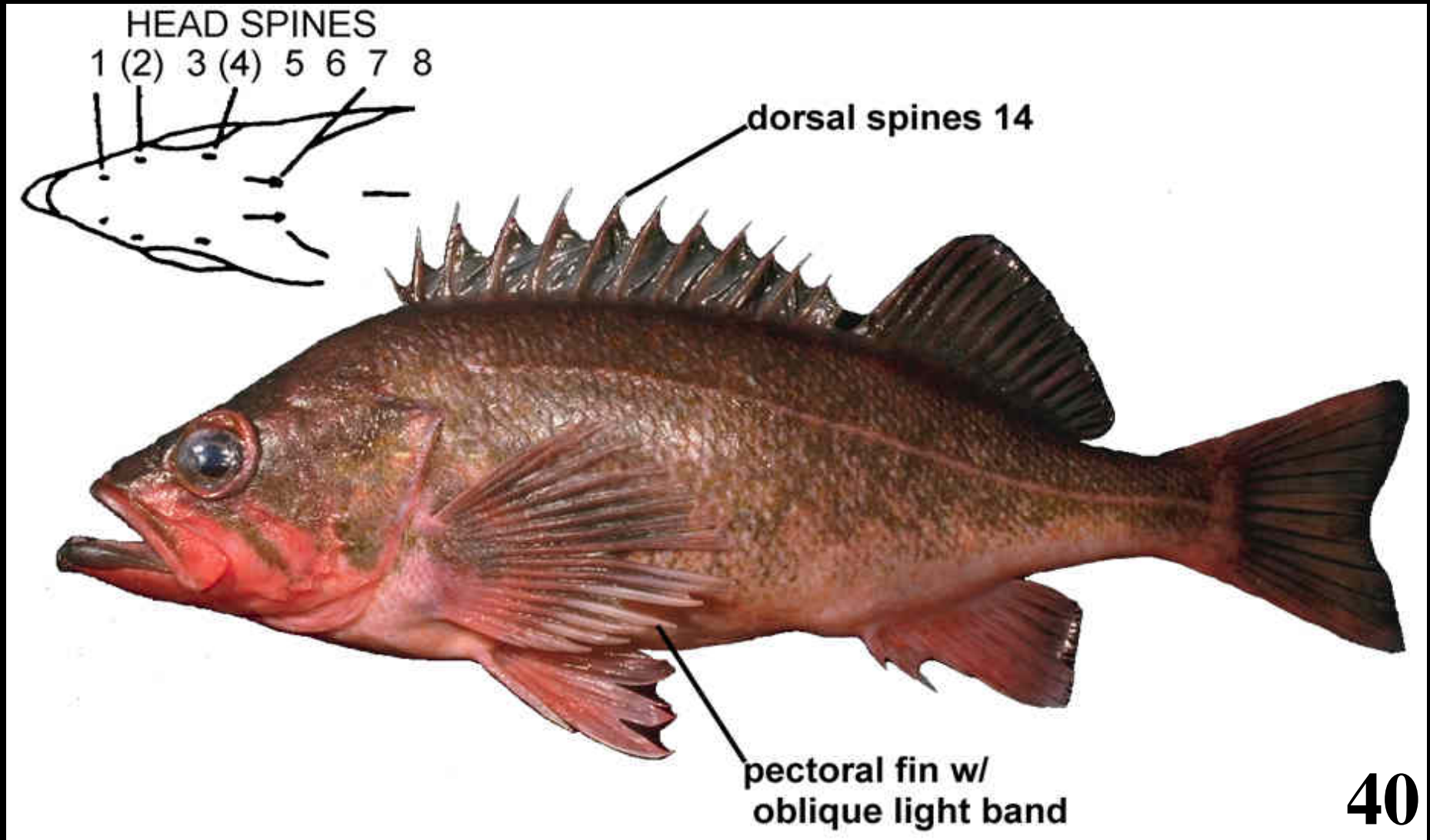
**1. Non-White Peritoneum**  
**(light gray-jet black)**

**2. White/Whitish Peritoneum**

**Others**



*Sebastes polyspinis*



Northern rockfish

*Sebastes variabilis* (Dusky)

Black

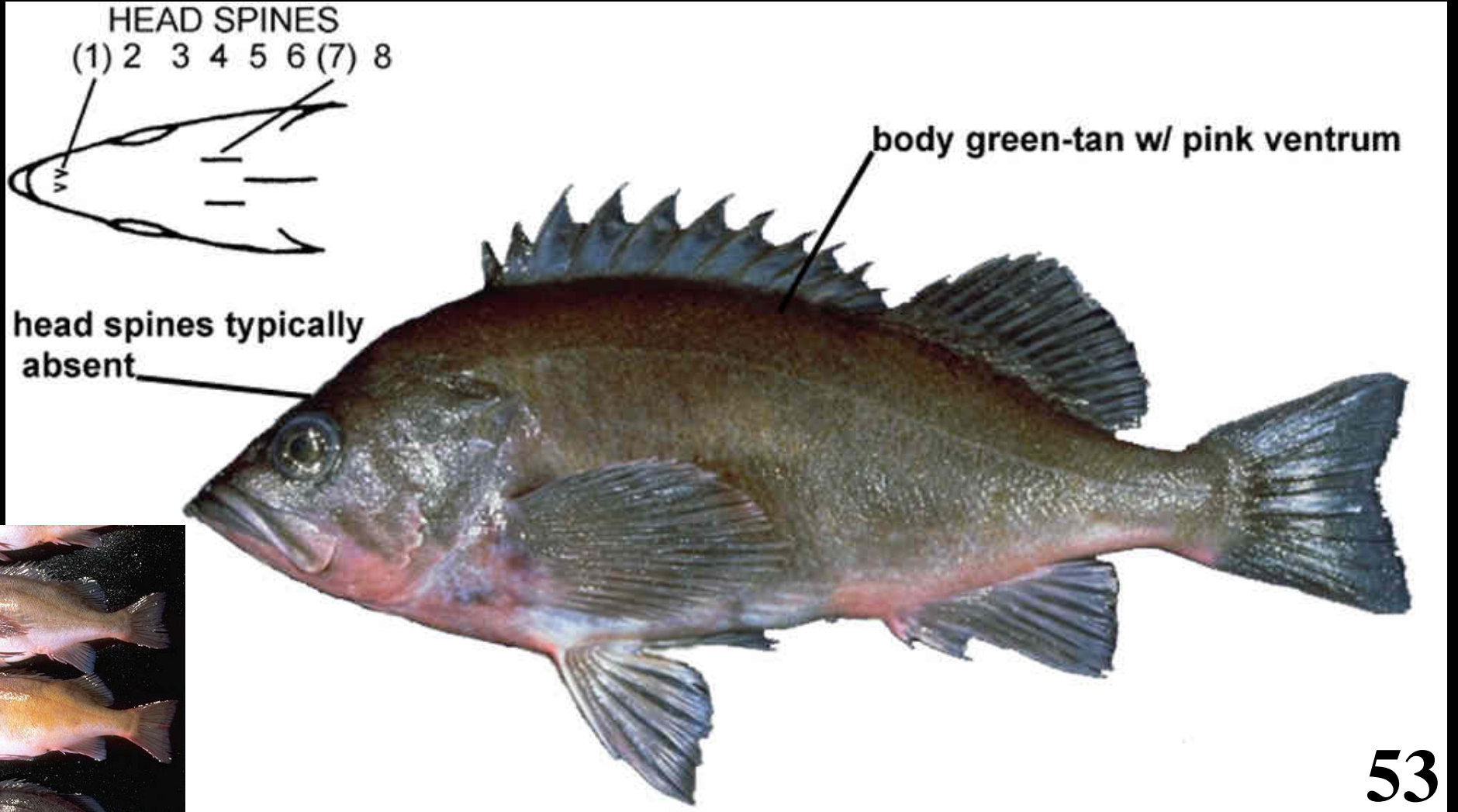


Red/Black



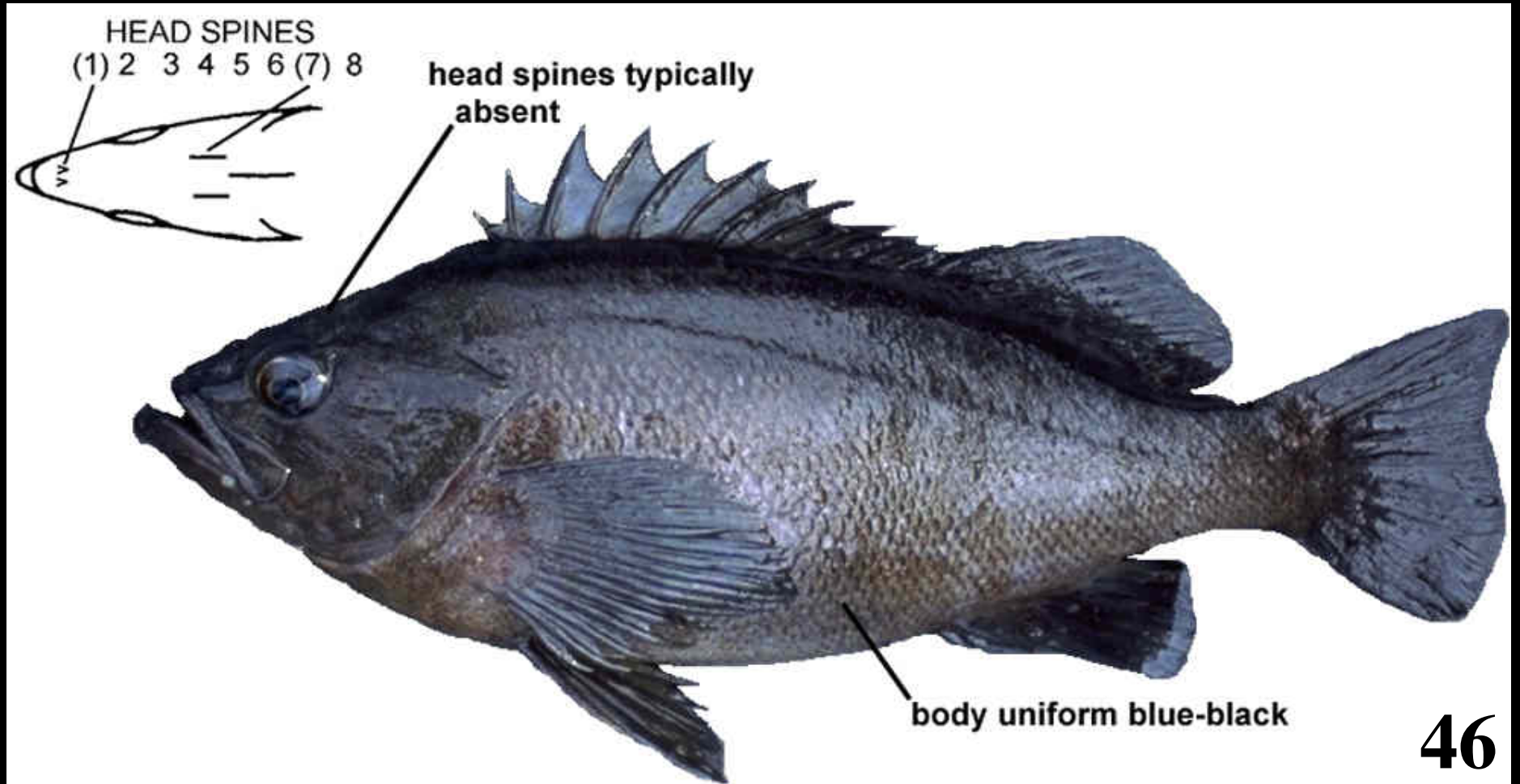
*Sebastes polyspinis* (Northern)

# *Sebastes variabilis*



Dusky rockfish

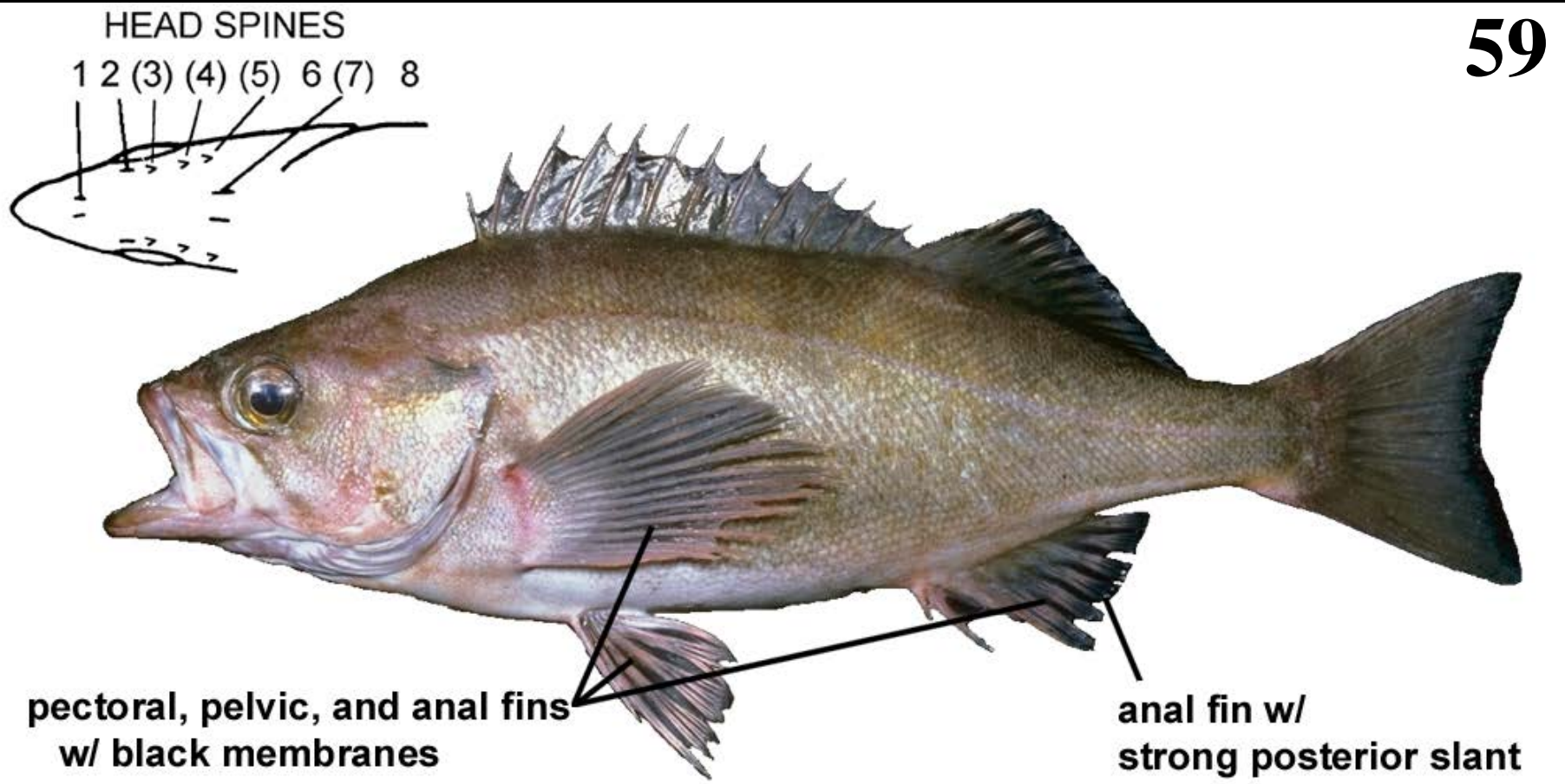
# *Sebastes ciliatus*



Dark rockfish

# *Sebastes entomelas*

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Widow rockfish

**Banded & Spotted Category**

**Red Category**

**Black Category**

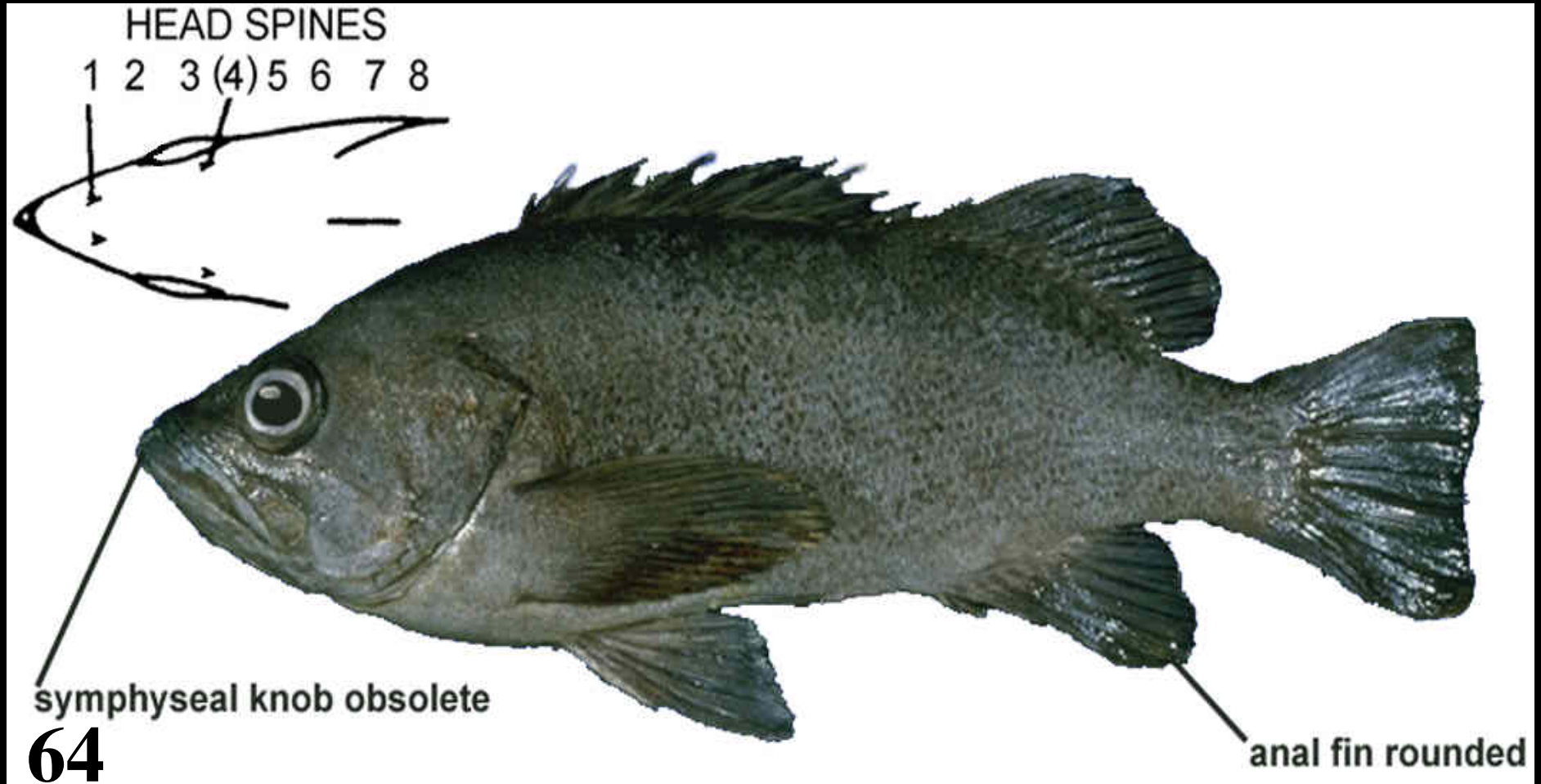
**Red/Black Category**

**1. Non-White Peritoneum**

**2. White/Whitish Peritoneum**

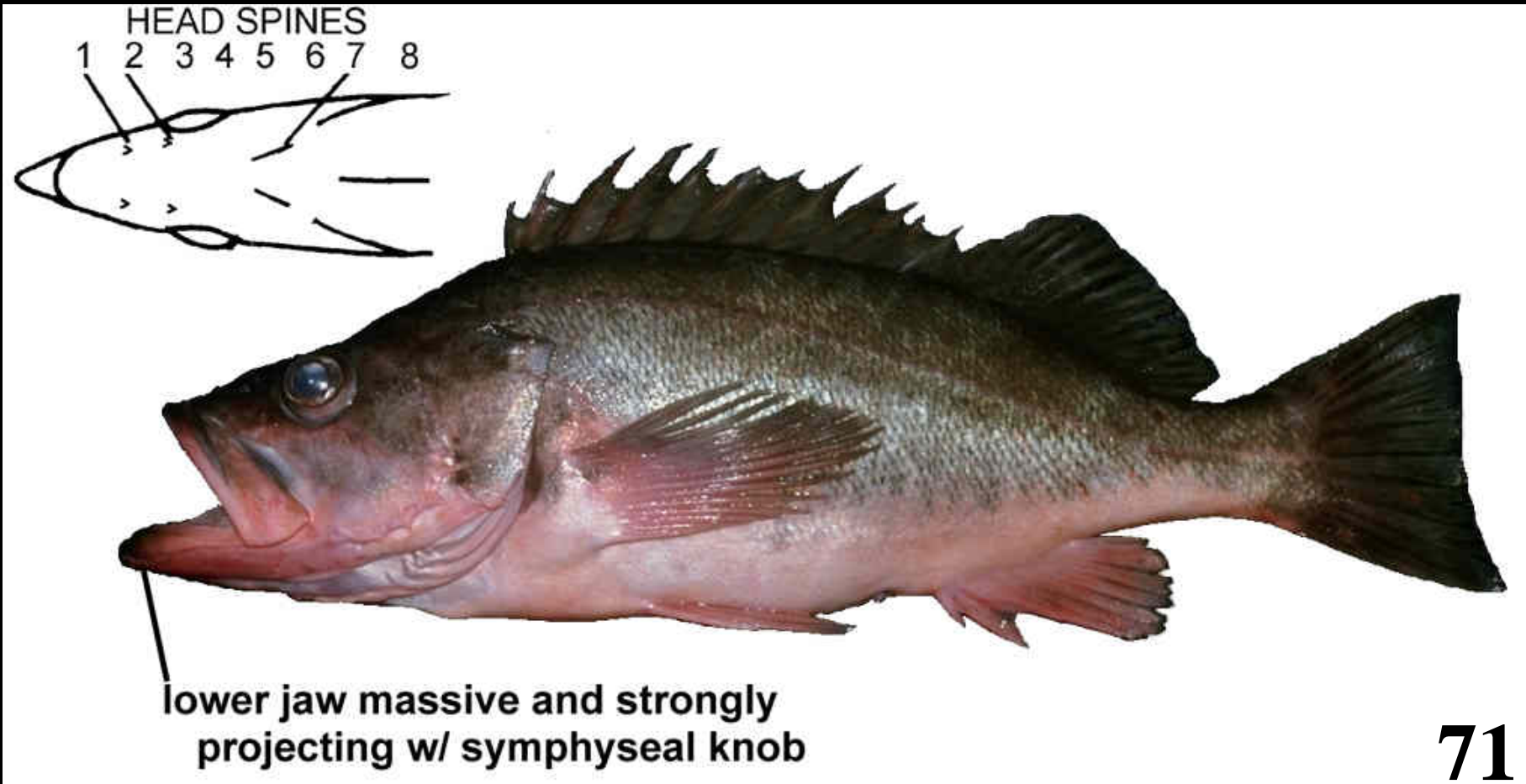
**Others**

# *Sebastes melanops*



Black rockfish

# *Sebastes brevispinis*



Silvergray rockfish

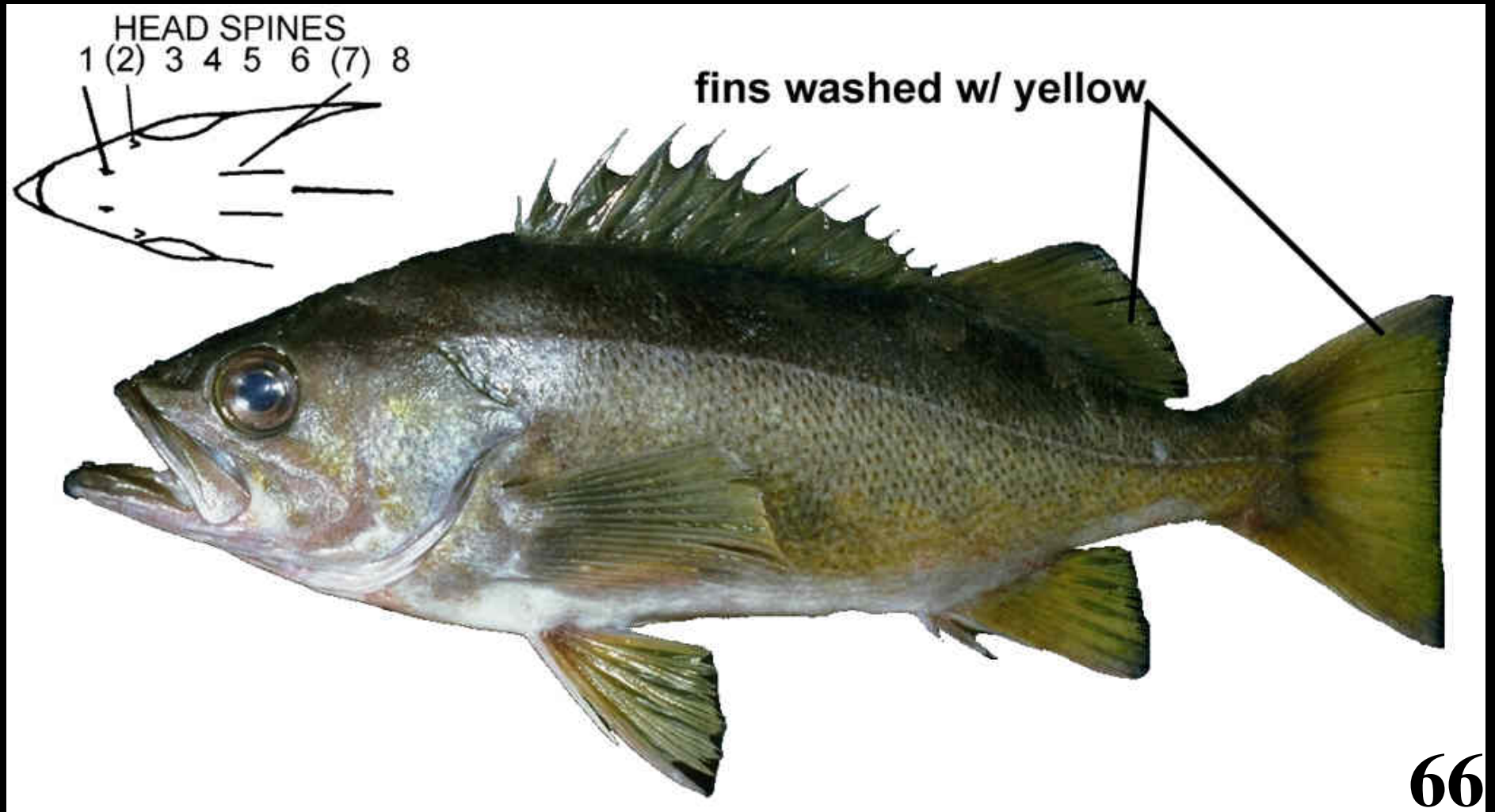


*S. paucispinis* (Bocaccio)



*S. brevispinis* (Silvergray)

*Sebastes flavidus*



Yellowtail rockfish

*Sebastes flavidus*



Yellowtail rockfish

Dark



peritoneum

Black



Dusky



Northern



# **Banded & Spotted Category**

## **Red Category**

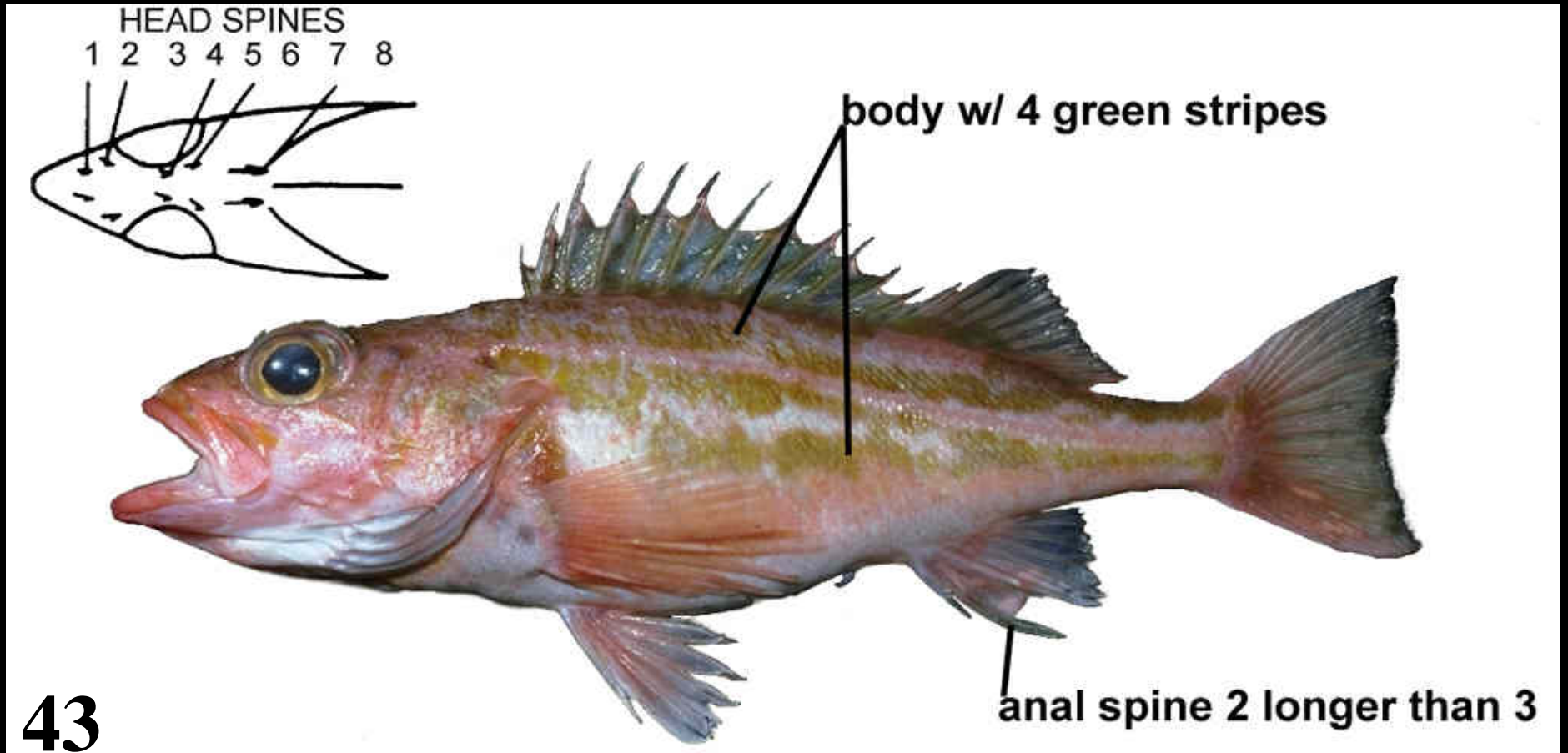
- 1. Cheek Spines Present – Thornyheads**
- 2. (Splitnose)**
- 3. H-O Markings Present**
- 4. “Big & Beefy” Group**
- 5. POP Group**

## **Black Category**

## **Red/Black Category**

## **Others**

# *Sebastes elongatus*



Greenstriped rockfish



Copper Rockfish



China Rockfish





Quillback Rockfish