NORTH PACIFC GROUND FISH OBSERVER PROGRAM

CRAB IDENTIFICATION

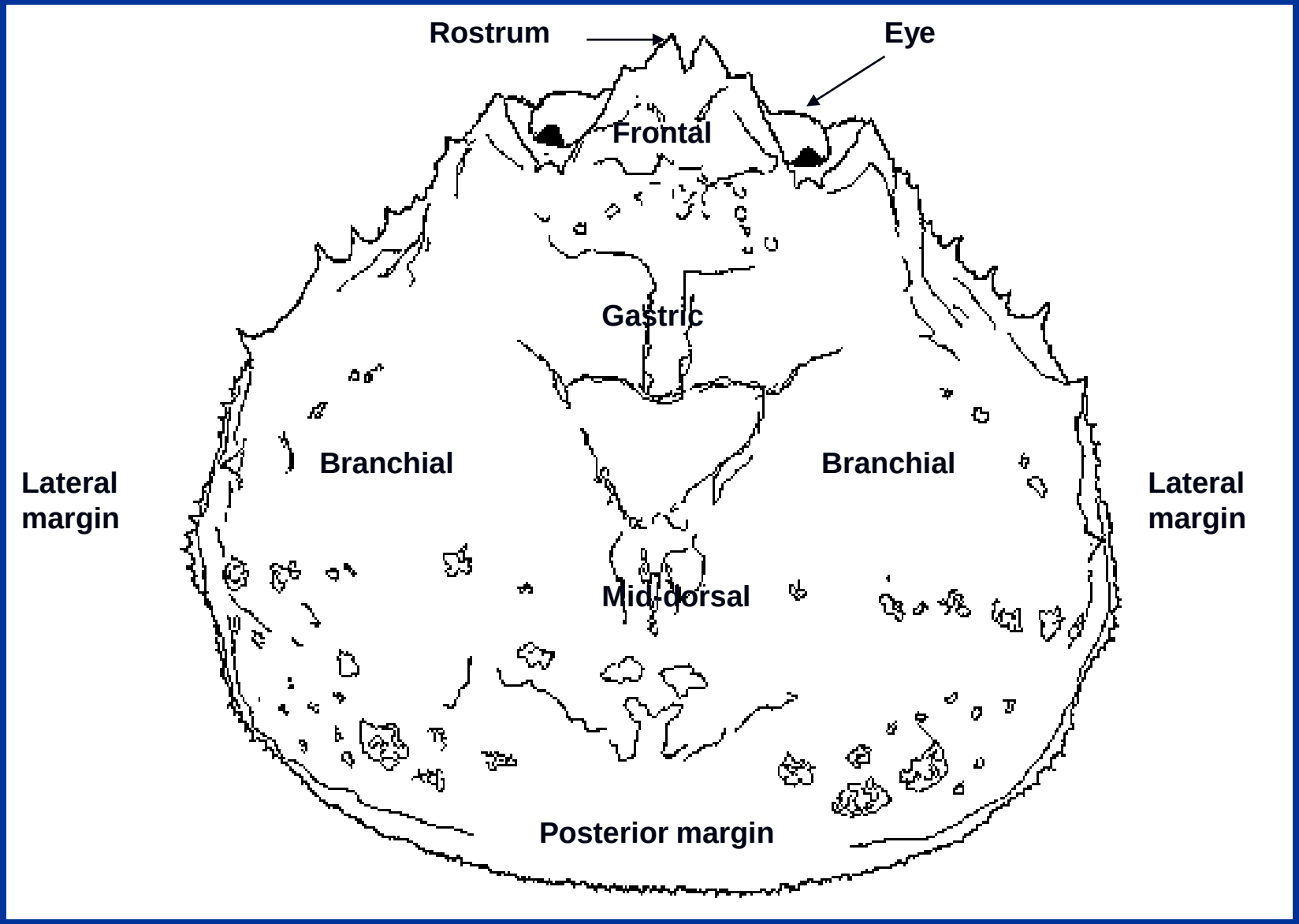
The Key Contains 20 Species or Species Groups

- Eight Prohibited Species of Crab
  - Must be measured and sexed by groundfish observers if found in species composition sample
  - May not be consumed or retained on vessel
- Twelve Non-Prohibited Species

Prohibited Species Crabs

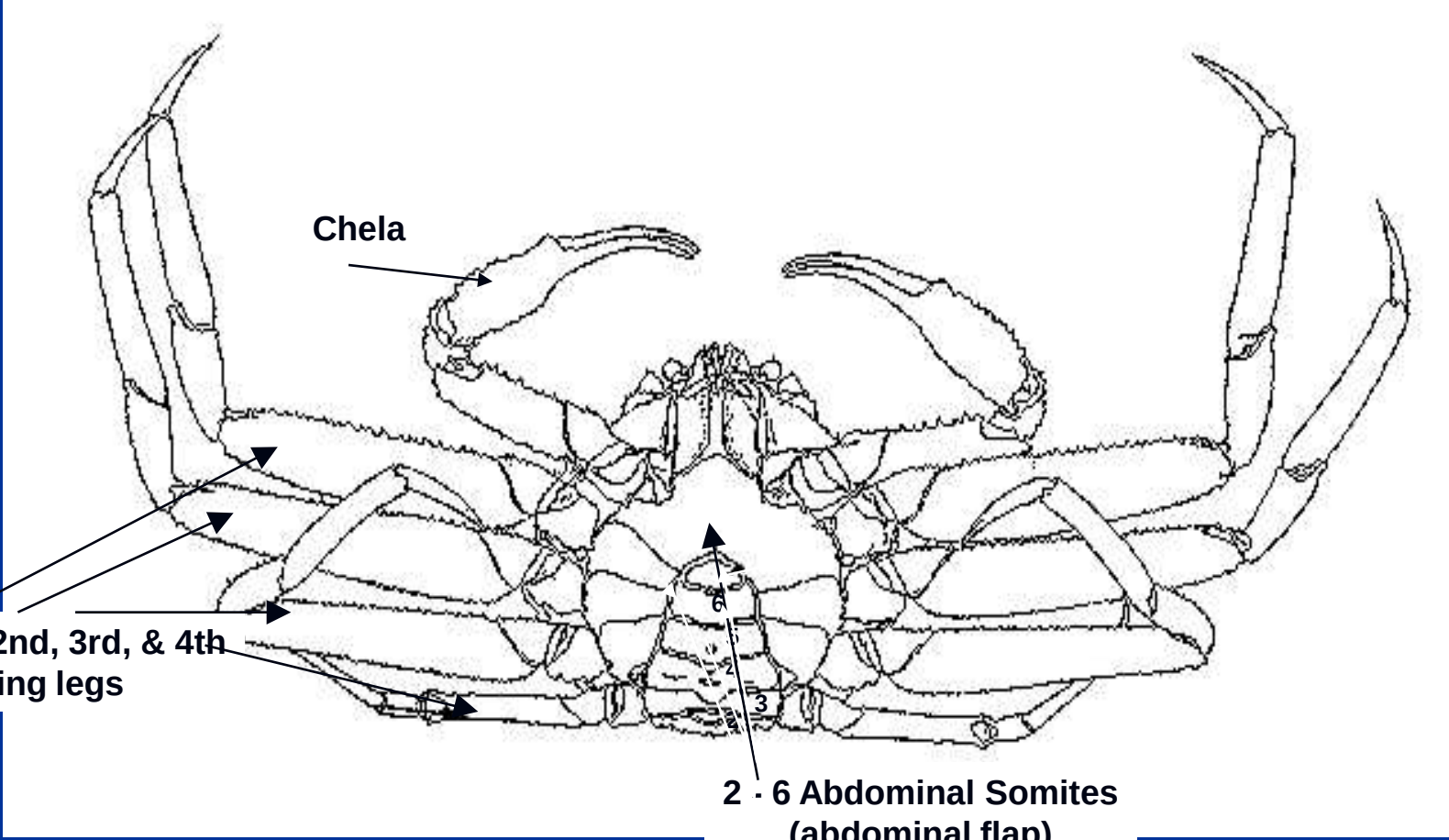
Tanner Crabs	King Crabs
Shallow Water Tanner Crabs • Bairdi Tanner crab • Opilio Tanner crab	Shallow Water King Crabs • Red King crab • Blue King crab
Deep Water Tanner Crabs • Tanneri Tanner crab • Angulatus Tanner crab	Deep Water King Crabs • Brown King crab • Couesi King crab

Key Features of Tanner Crab Carapace



(L.S. Jademec)

Key Features of Ventral Side of Tanner Crabs



(L.S. Jademec)

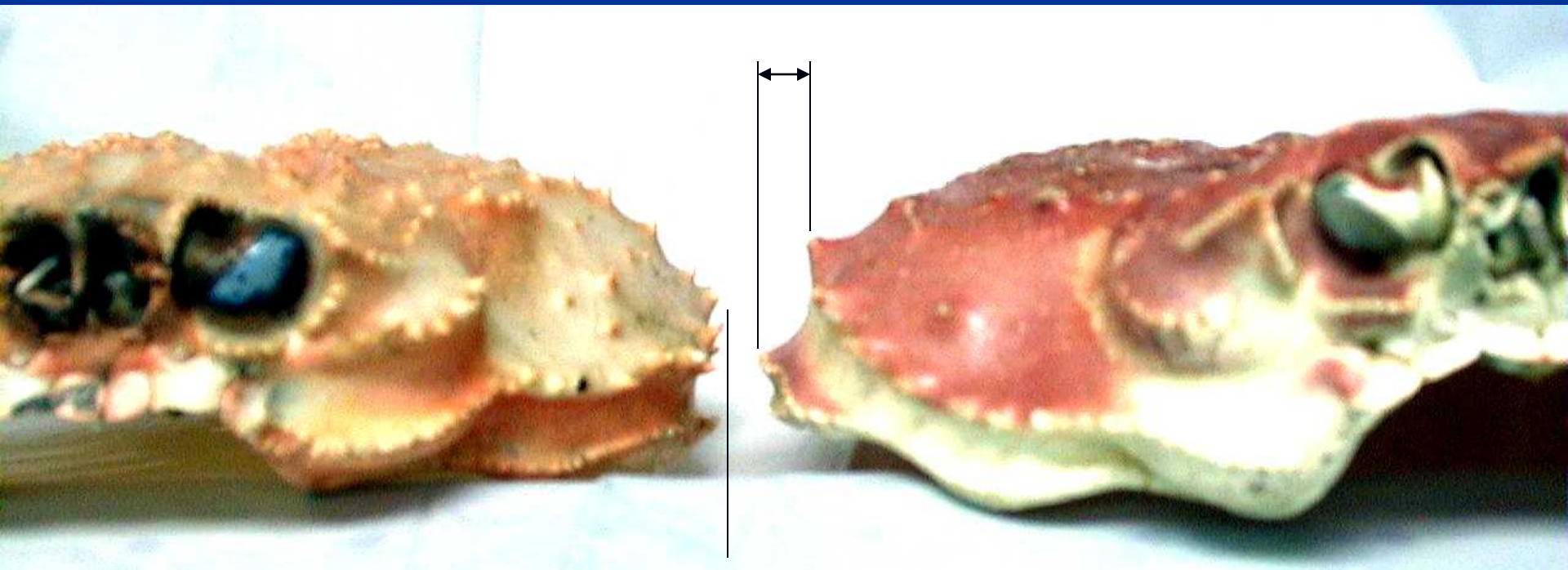
Who's Who among Tanner Crabs? Deep Water? Shallow Water?

Shallow Vs. Deep Water Tanners

	Deep Water	Shallow Water
Lateral Margin	Does NOT protrude beyond Branchial region	Does protrude beyond Branchial region
Branchial Ridges	Prominent branchial ridges	Not prominent
Coloration	Coloration Uniform	Ventral coloration light

Lower Lateral Margins

Deep water **Shallow Water**



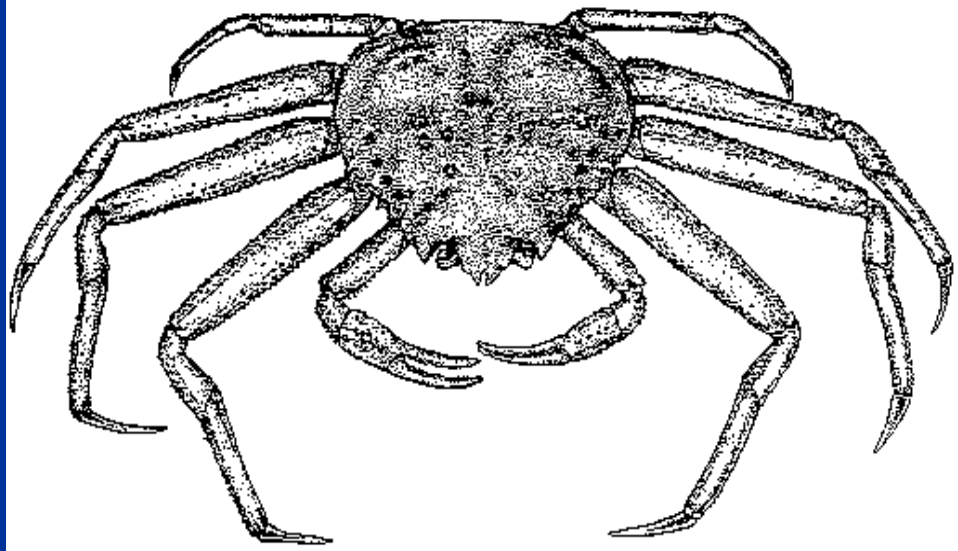
Branchial Regions & Ridges

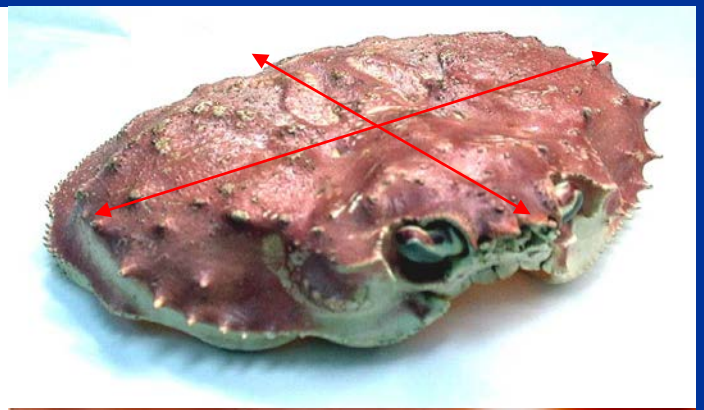
Deep water **Shallow Water**

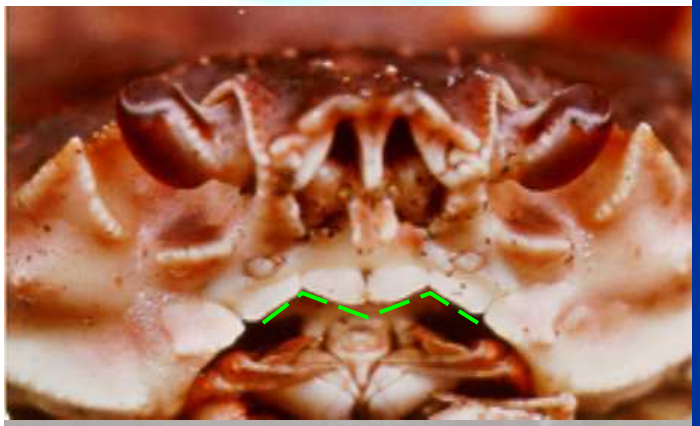
SHALLOW WATER TANNER

Bairdi Tanner Crab

1. 4 pairs of walking legs







2. Lower lateral margin protrudes beyond branchial region
3. Carapace wider than it is long

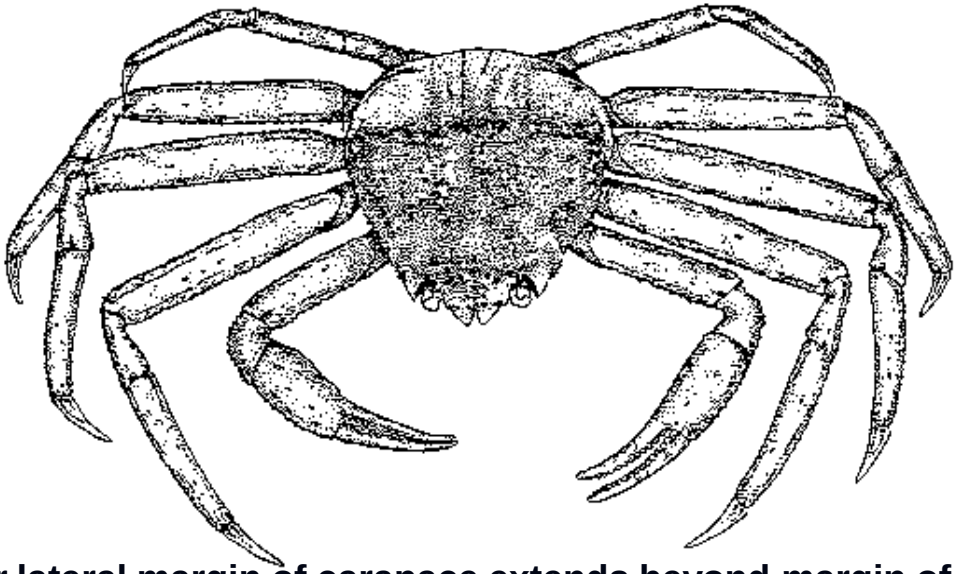
Eyes usually **RED**

4. Prominently notched epistomal margin “M”
5. Tips of rostrum sharply pointed
6. Rostrum pointed upward

Bairdi Tanner Crab

Opilio Tanner Crab

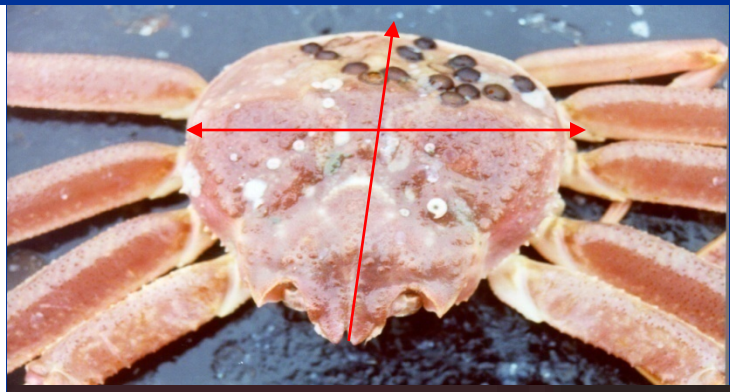
1. 4 pairs of walking legs

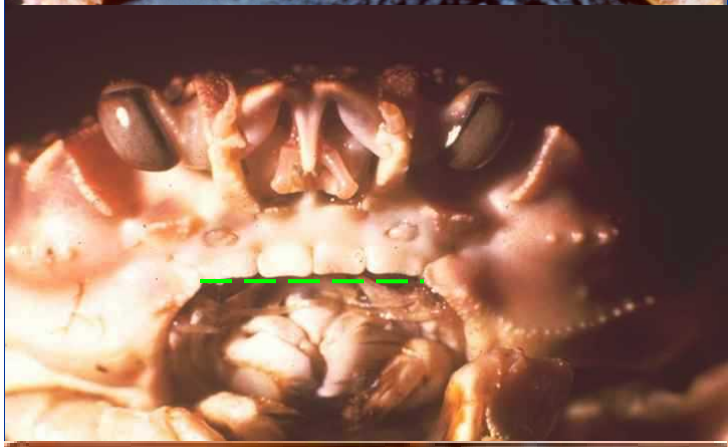


2. Lower lateral margin of carapace extends beyond margin of branchial region
3. Carapace width & length about equal

Eyes usually GREEN

4. Epistomal margin fairly straight & even
5. Tips of rostrum rounded
6. Rostrum almost horizontal

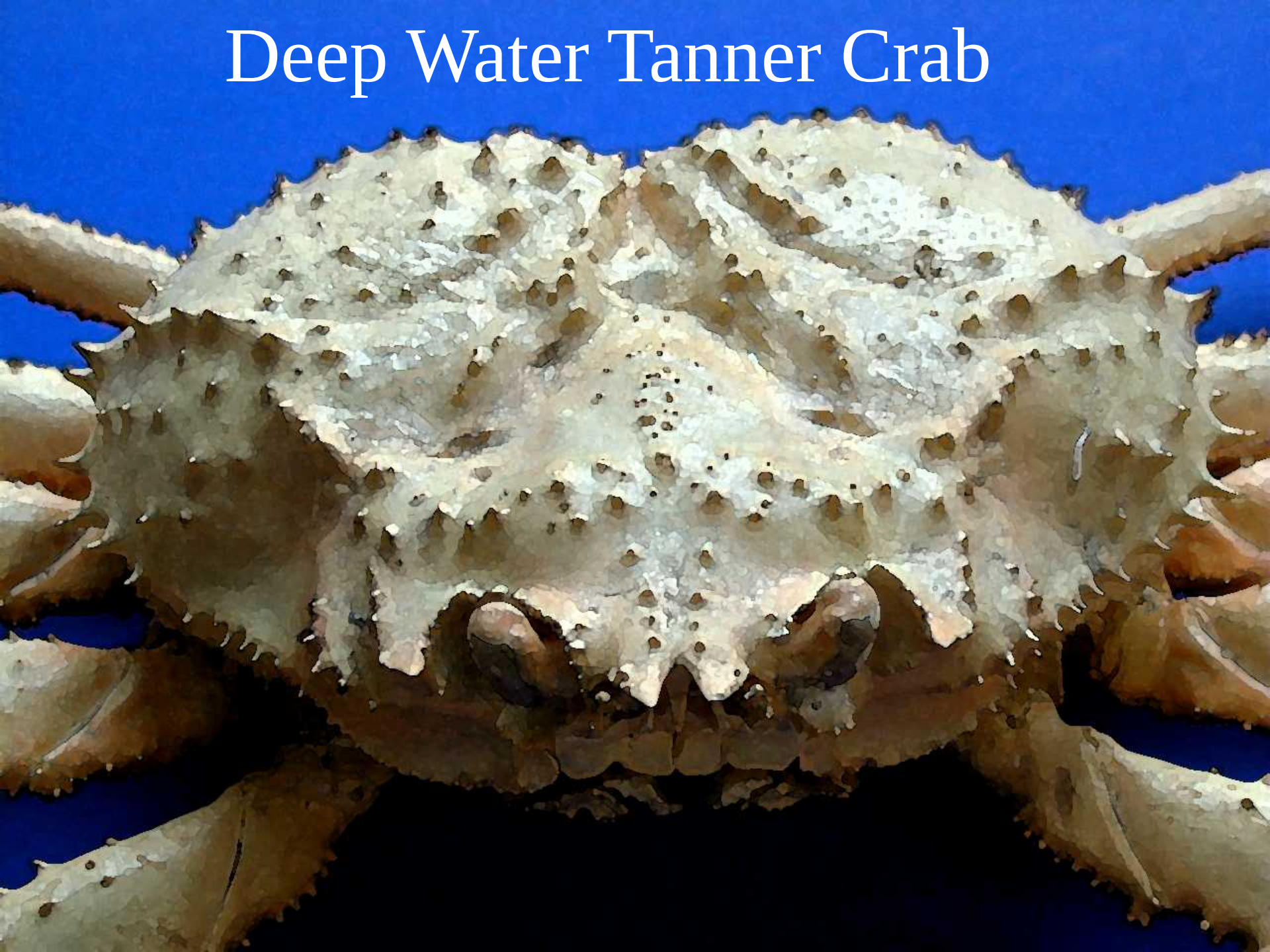




Opilio Tanner Crab

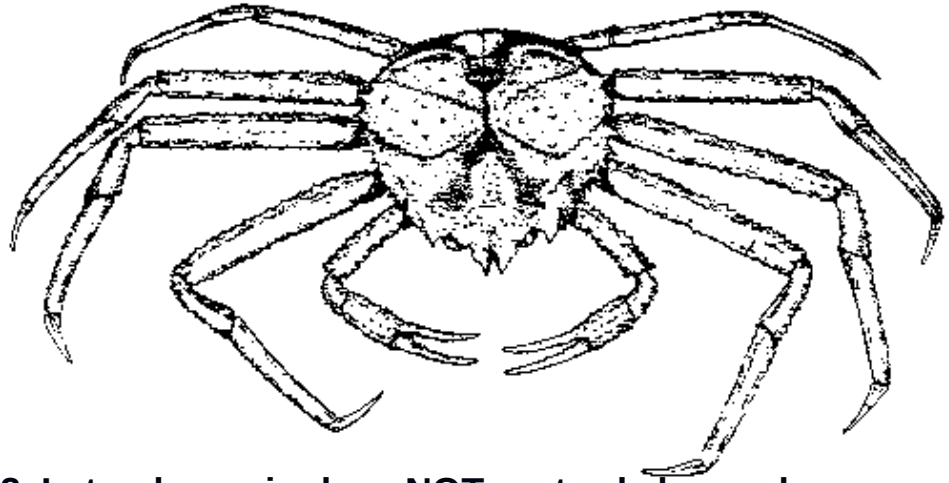
Opilio or Bairdi

Deep Water Tanner Crab



Tanneri Tanner crab

1. 4 Pairs of walking legs



2. Lateral margin does NOT protrude beyond branchial region

3. Branchial region swollen with deep notch at mid line

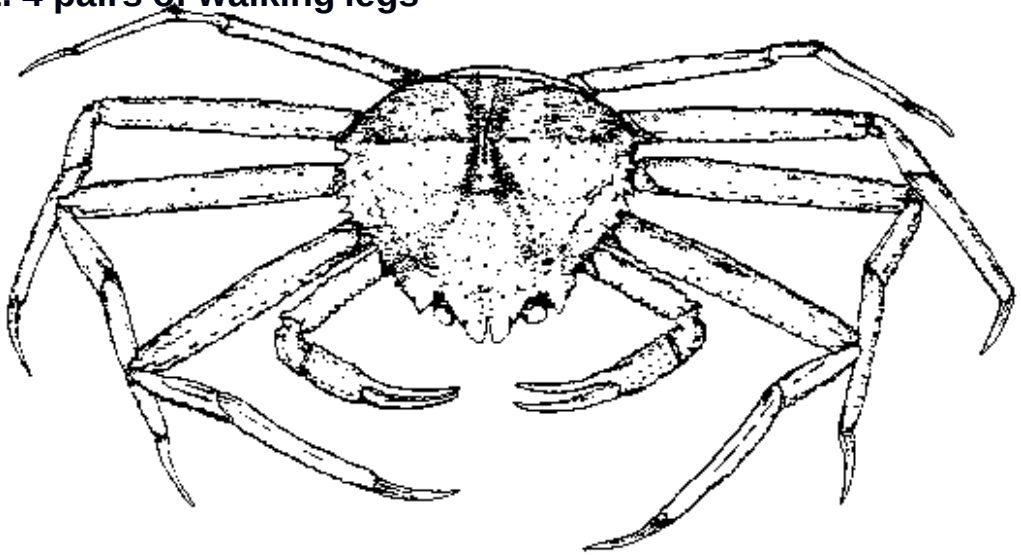
4. Prominent branchial ridges form a “U” with 3 spines at intersection

5. Tips of rostrum sharply pointed and pointed upward

Tanneri tanner crab

Angulatus Tanner crab

1. 4 pairs of walking legs



2. Lateral margin does NOT protrude beyond branchial ridges

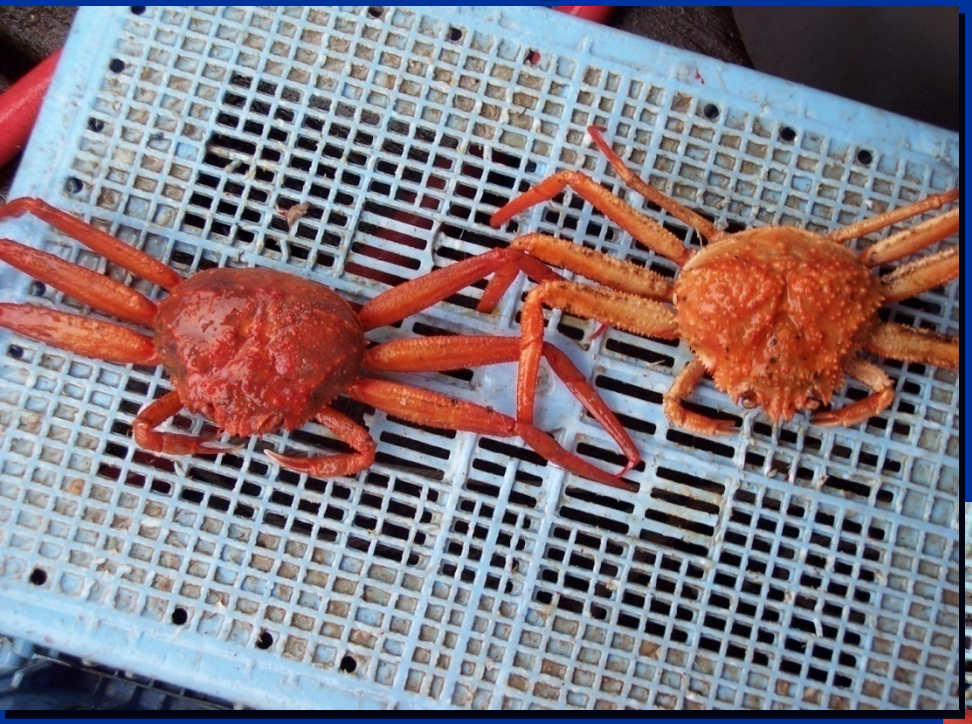
3. Branchial region slightly swollen with shallow notch at mid line

4. Prominent branchial ridges form triangular point or “V” with a single spine at the intersection

5. Tips of rostrum frequently rounded and usually horizontal

Tanneri or Angulatus

Angulatus and Tanneri



Sexing Tanner crabs

Female Tanner with Eggs

King Crab

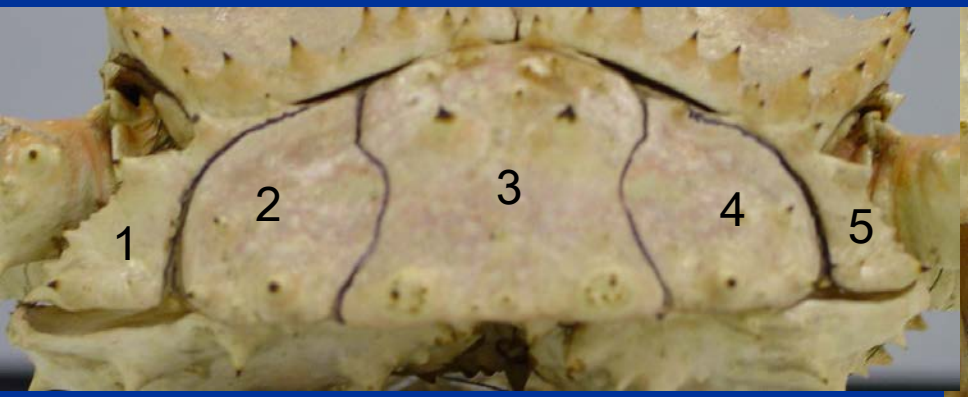
Shallow Vs. Deep Water King Crabs

Page 3, couplet 9 of Crab Key

Deep Water Kings	Shallow Water Kings
3 Abdominal plates on 2nd abdominal segment	5 Abdominal plates on 2nd abdominal segment
Rostrum forked	Rostrum ending in a single thorn-like spine
Ventral rostrum spine	NO ventral spine
Dark ventral side	Light ventral side

KING CRAB

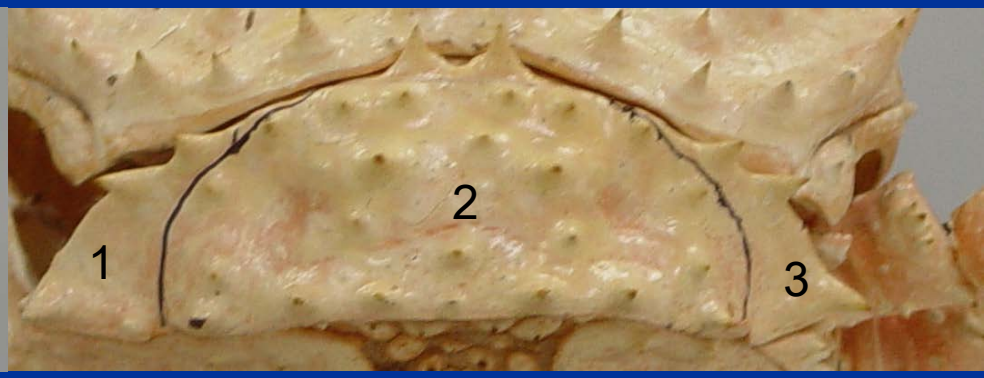
Shallow Water



5 plates

Deep Water

3 plates



Second Abdominal Flap

KING CRAB

Rostrum

Shallow Water

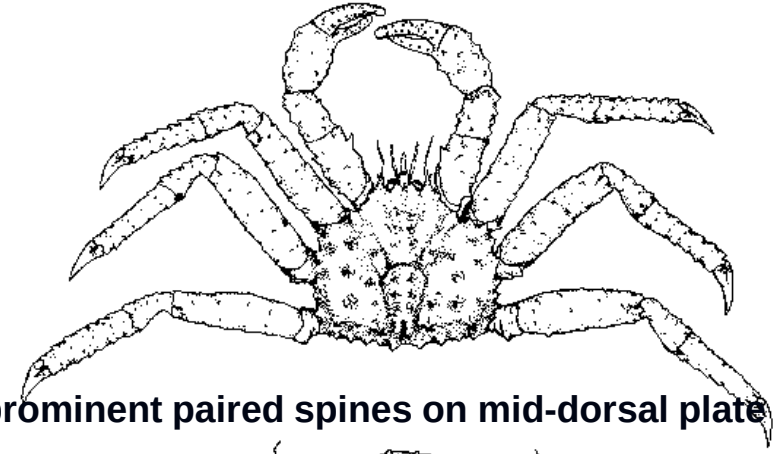
Deep Water

Shallow Water King Crabs

Red King crab

page 4, couplet 10, Crab Key

1. 3 pairs of walking legs
2. 5 separate abdominal plates



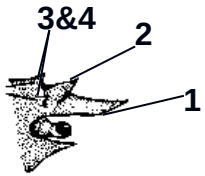
3. 6 prominent paired spines on mid-dorsal plate

TYPE 1

Side view

right antennae base

TYPE 2



Spine 2 may be double pointed

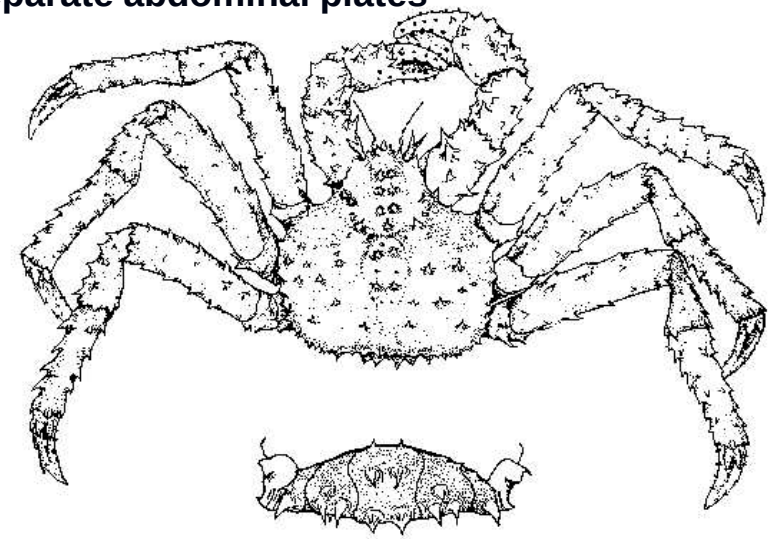
4. Rostrum: 4 - 5 spines
5. 1-2 spines at base of antennae

Red King crab

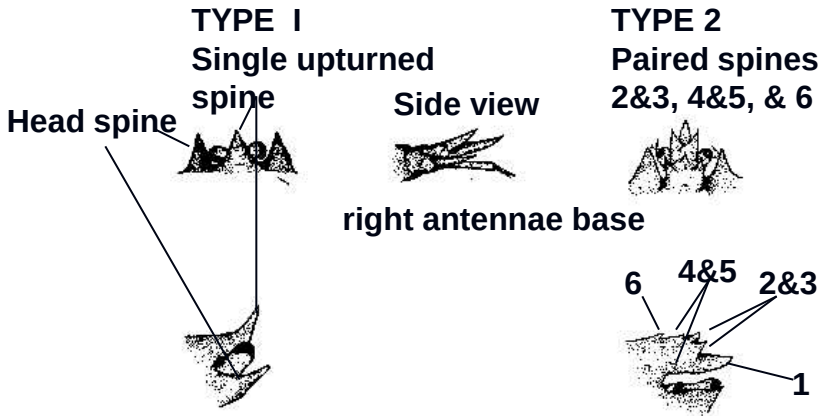
Blue King crab

Page 4, couplet 10 Crab Key

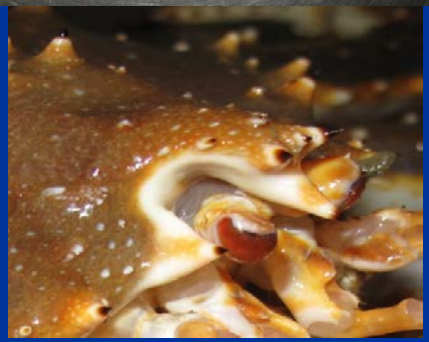
1. 3 pairs of walking legs
2. 5 separate abdominal plates



3. 4 prominent paired spines on mid-dorsal plate



4. Rostrum: 1 or 6 spines
5. 3 spines at base of antennae



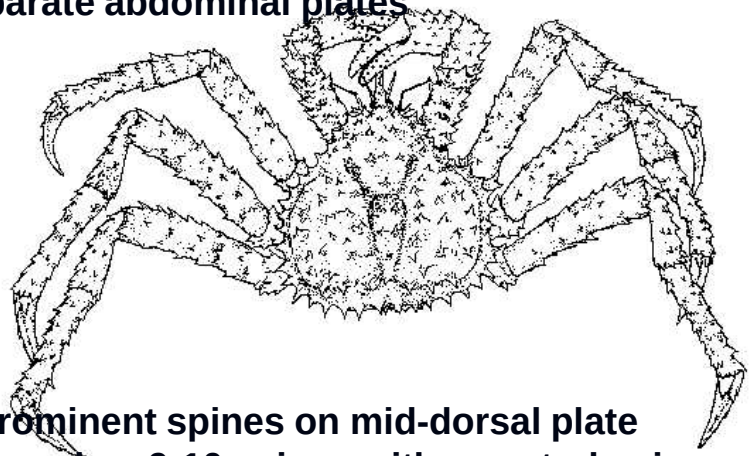
Blue King

King crab… Red or Blue???

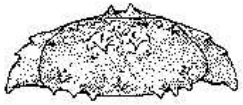
Deep Water King Crabs

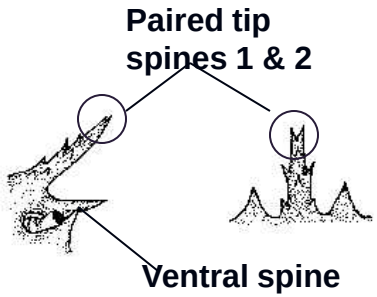
Golden or Brown King crab

1. 3 pairs of walking legs
2. 3 separate abdominal plates



3. 5-9 prominent spines on mid-dorsal plate
4. Rostrum has 9-10 spines with a ventral spine





Side view of

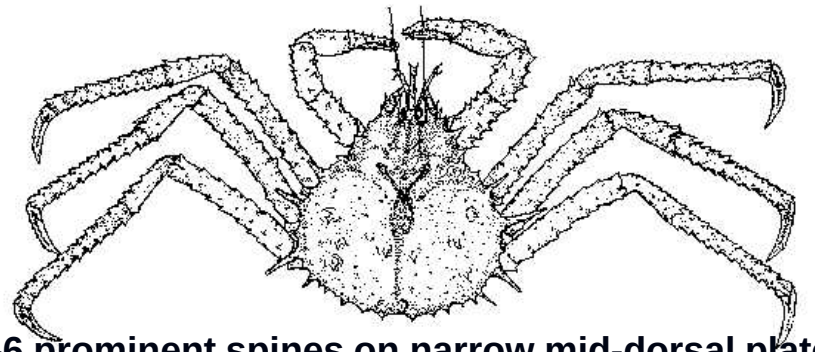
right antennae base

5. Transverse depression much longer than wide
6. Spines on lateral margin of carapace are about equal in length to those on carapace surface

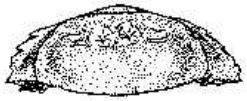
Golden or Brown King Crab

Couesi King crab

1. 3 pairs of walking legs
2. 3 separate abdominal plates



3. 4-6 prominent spines on narrow mid-dorsal plate
4. 5-7 spines on rostrum, tip is usually double pointed, includes a ventral spine



Rostrum tip usually double pointed

Ventral spine

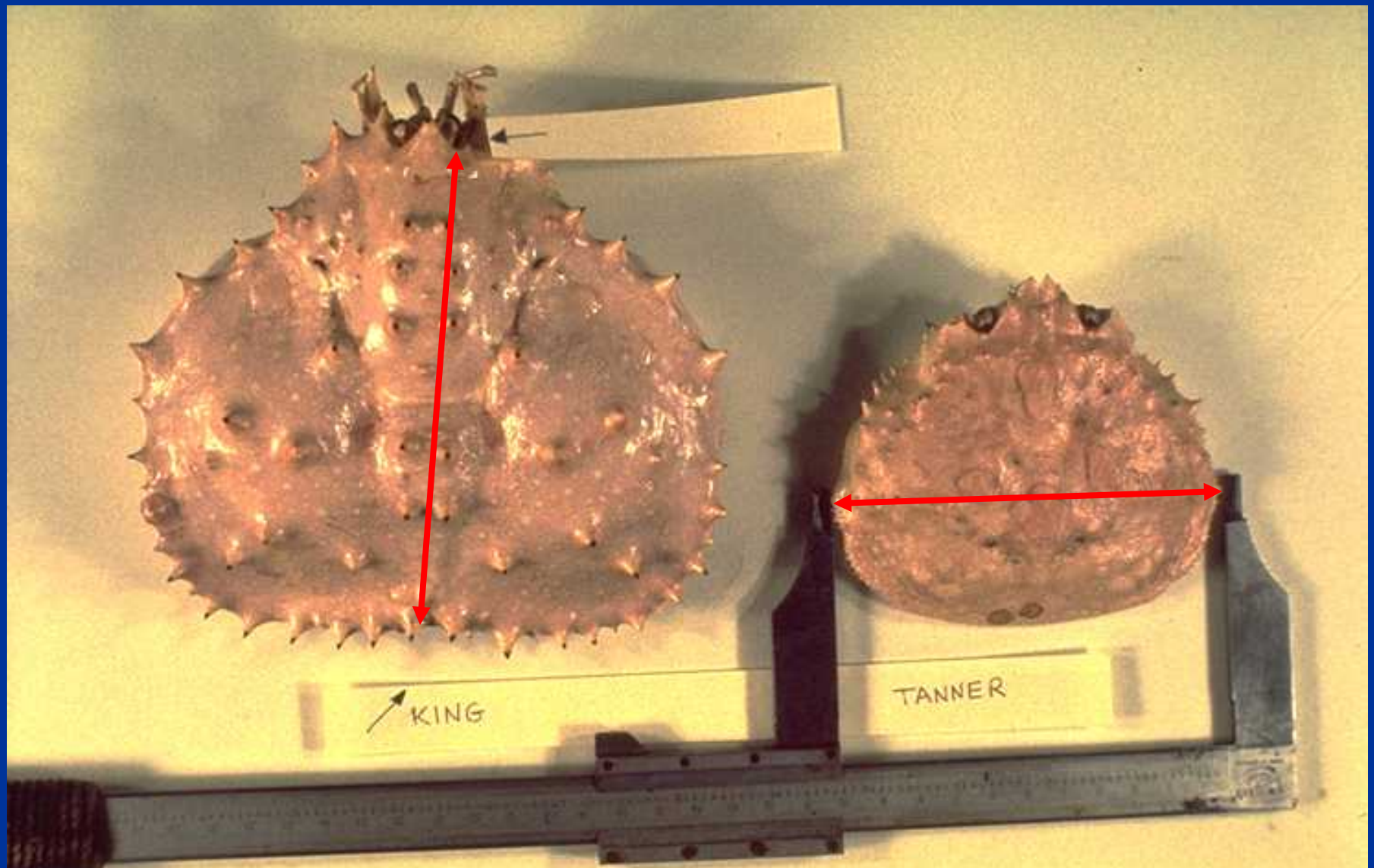
Side view of antennae

5. Transverse depression length & width about equal
6. Long spines on lateral margin of carapace

Couesi King crab

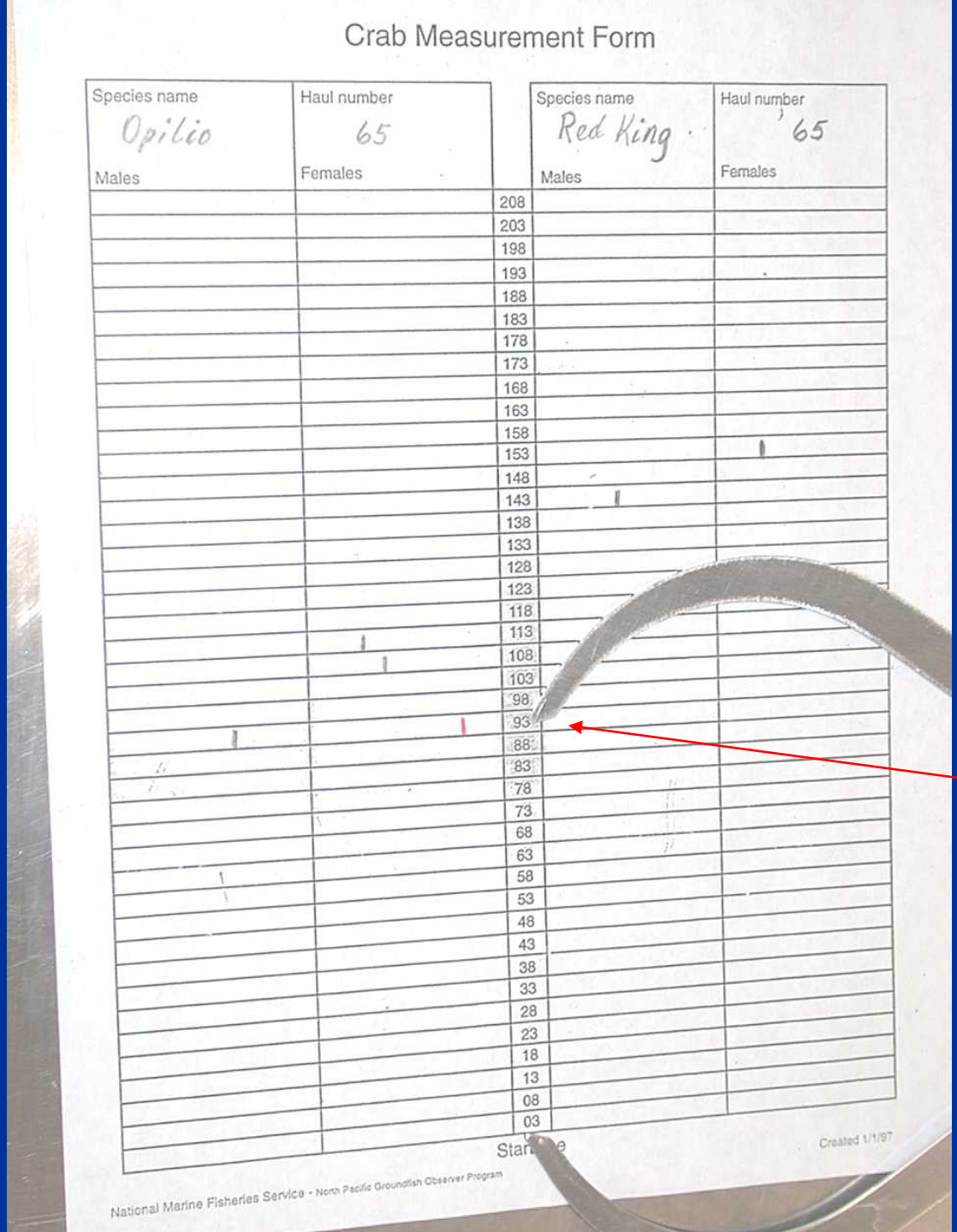
Sexing King crabs

Measuring crabs



Measuring Tanner Crabs

Measuring King Crabs

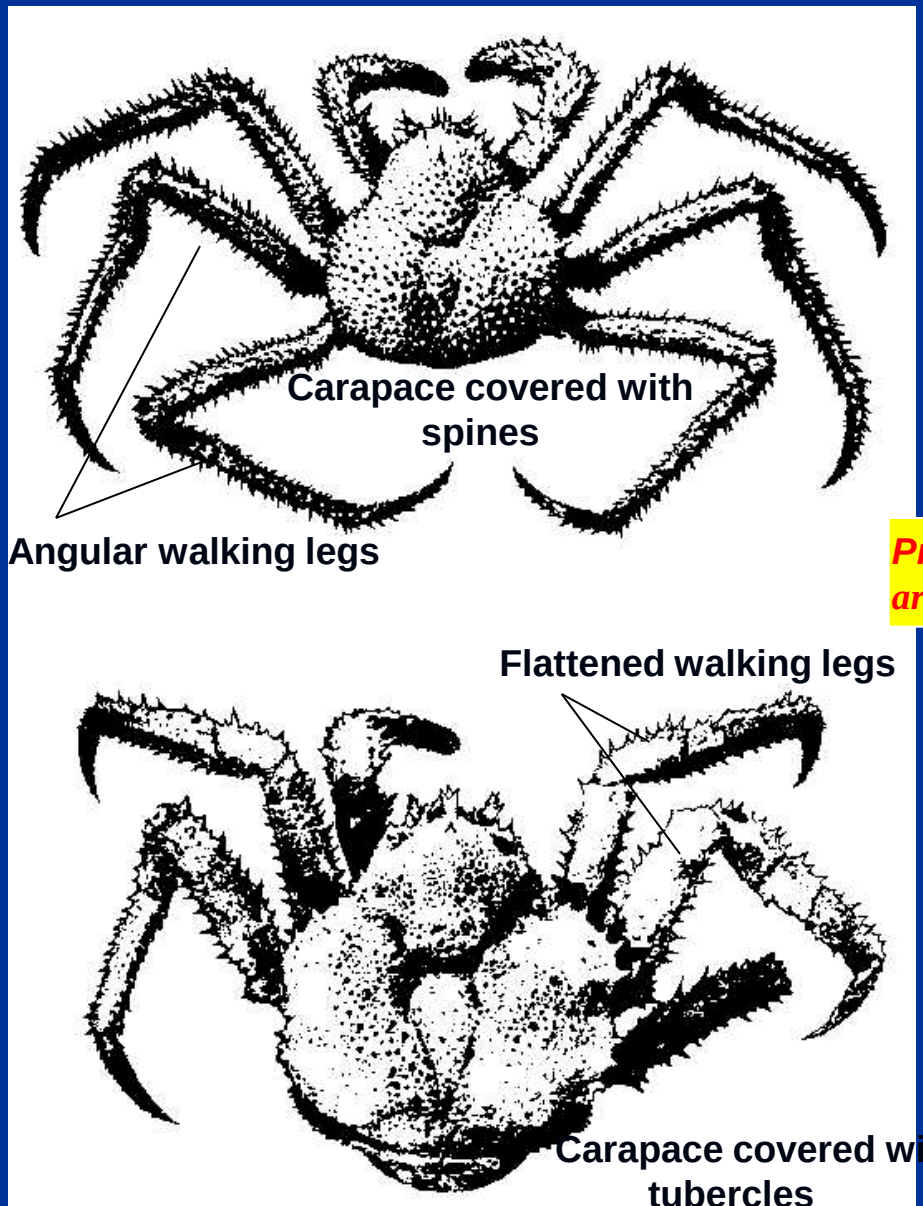


Measured length is 93 mm.

Non Prohibited Species of Crab Found in Your Key

- *Paralomis multispina*
- *Paralomis verrilli*
- Dungeness crab
- Korean Horsehair crab
- Telmessus crab
- Lyre crabs & Toad crabs
- Scaled crab
- Box crab
- Decorator crab
- Hermit crab
- Fuzzy crab
- Rhinoceros crab

Paralomis Crabs



***Prominent** Spine in mid-gastric area on both species*

Photos from Schmitt, 1921

Paralomis *multispina*

KING CRAB vs PARALOMIS

2nd abdominal flap

Shallow King

5 plates

Paralomis

1 plate

Deep King

3 plates

Paralomis verrilli

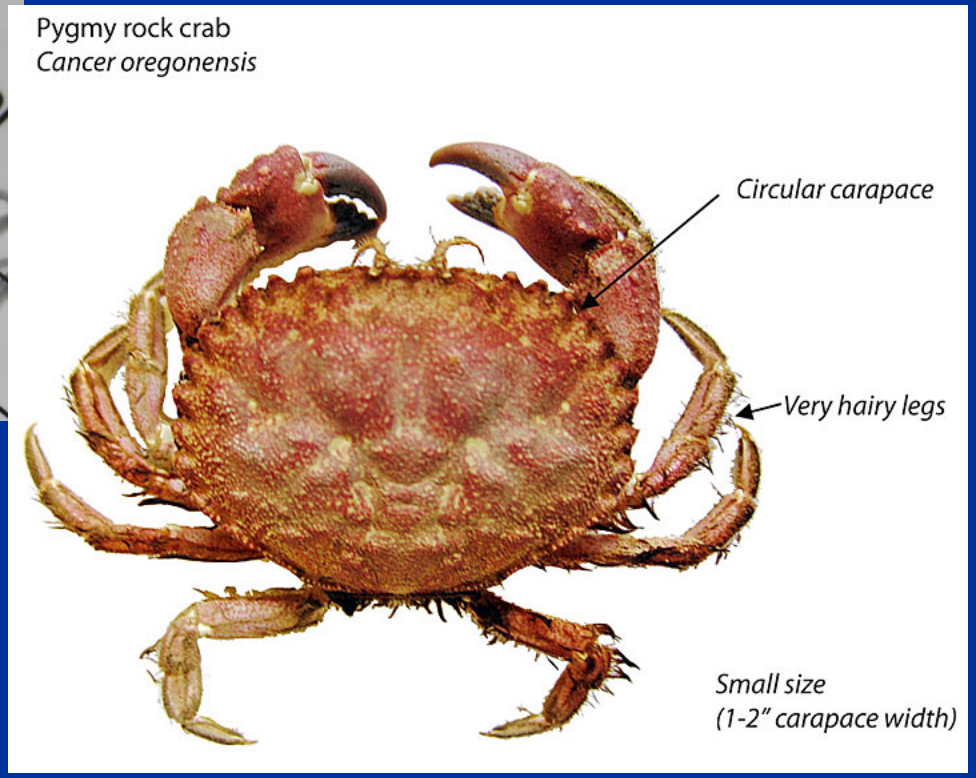
Take Photos

Dungeness Crab

- 1. 10 spines on front margin of carapace.
- 2. Carapace smooth and oval shaped.
- 3. Mostly caught in SE Alaska.

Pygmy Crab

1. Tiny crab.
2. Black tipped claws.



Korean Horsehair crab

- 1. 7 spines posterior of eye that point forward.
- 2. White tipped claws.

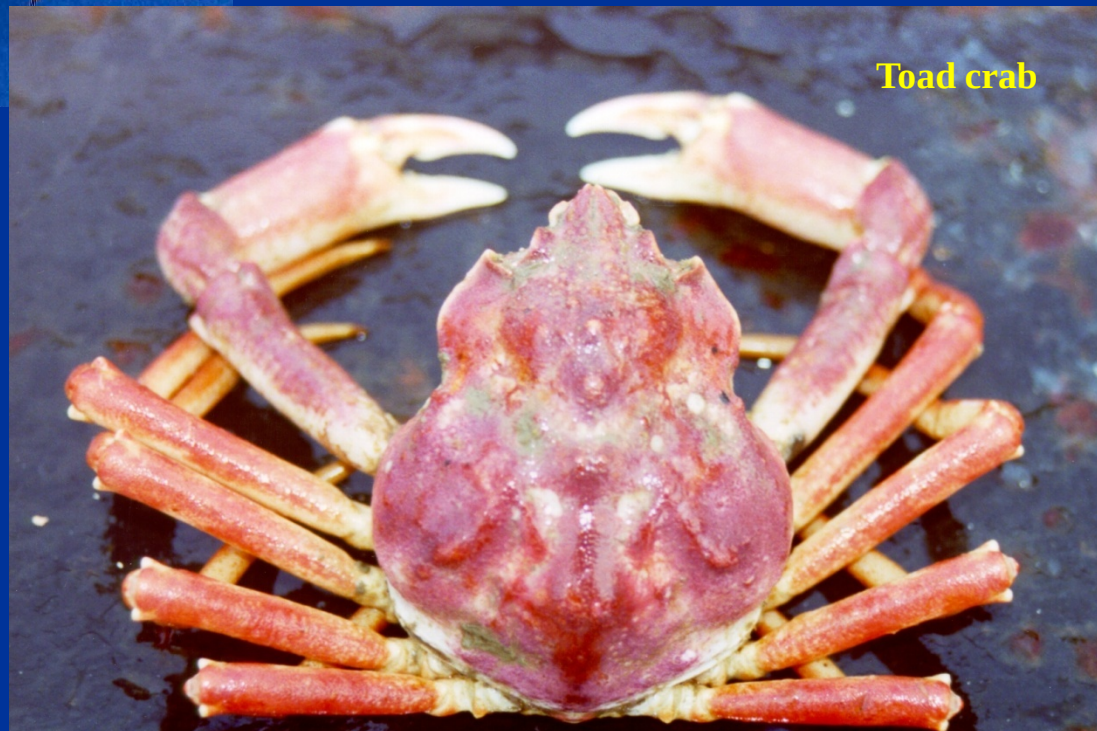
Telmessus crab

- 1. Black tipped claws.
- 2. 6 spines posterior of eye that point laterally.

Lyre crabs

Lyre crab

Genus Hyas



Toad crab

Scaled crab

Box crab

- 1. Box shaped and heavily calcified carapace.
- 2. Breathing ports on claws.

Decorator Crab

Hermit crab

Fuzzy Crab

1. Abdomen not segmented or calcified.
2. Claws usually orange.

Rhinoceros Crab

- 1. Triangular carapace.
- 2. Round ball surrounded by deep semicircular grooves.

Lab Time!
Crab Identification