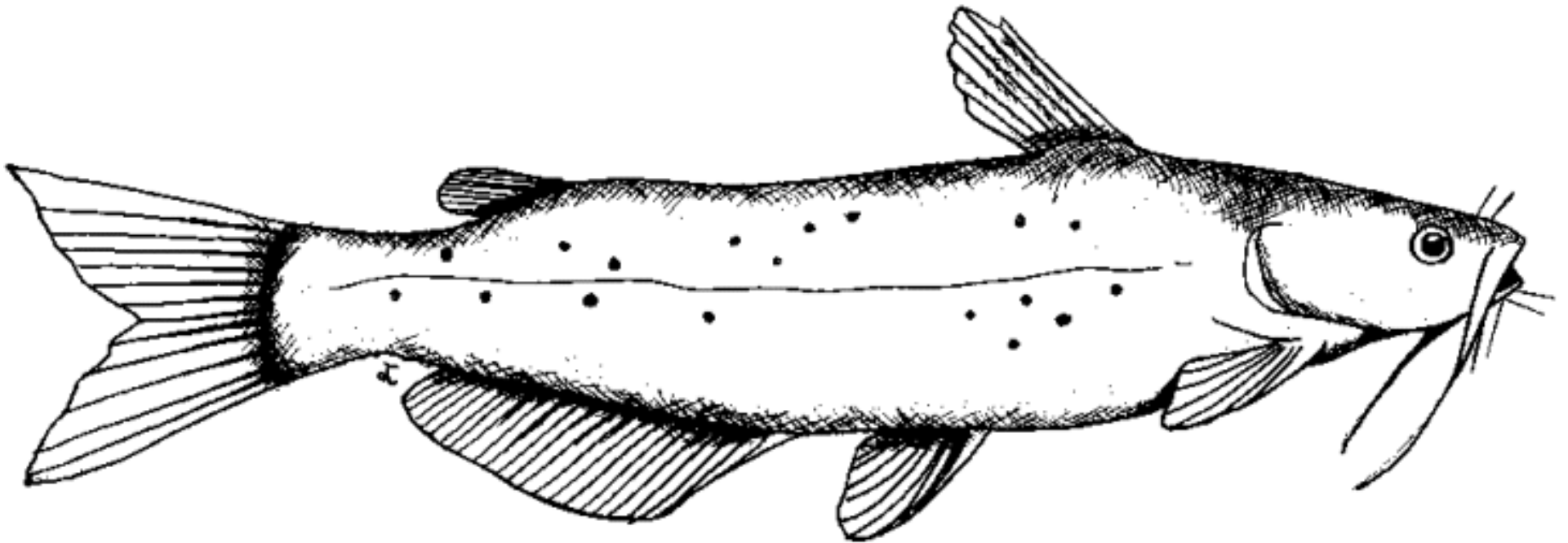


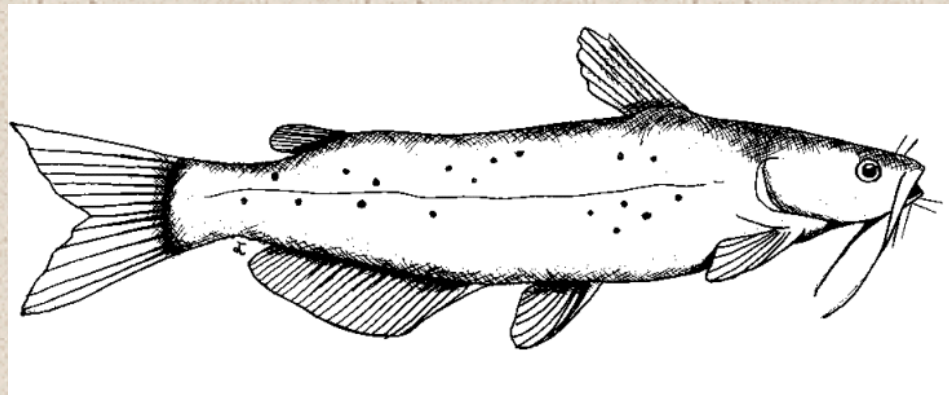
# Using A Dichotomous Key- An Example

Adapted from Fishes of the Chesapeake Bay, Murdy et al, 1997



1a. Jaws absent; mouth in form of roundish funnellike opening with horny, conical teeth; pectoral and pelvic fins absent; 7 pairs of gill openings present.....Lampreys

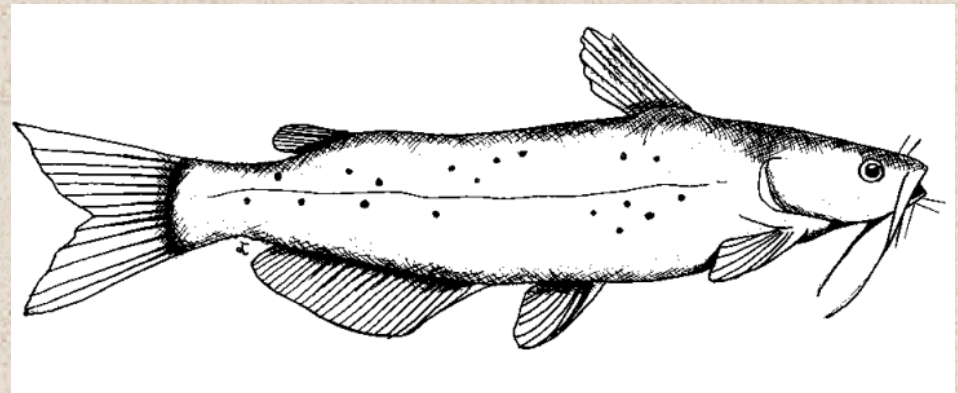
1b. Jaws present; mouth not as above; pelvic, pectoral or both fins present; fewer than 7 pairs of gill openings present.....2



1b. Jaws present; mouth not as above; pelvic, pectoral or both fins present; fewer than 7 pairs of gill openings present.....2

2a. Single pair of gill openings present.....bony fishes ....11

2b. Five pairs of gill openings present .....sharks, skates, rays...3

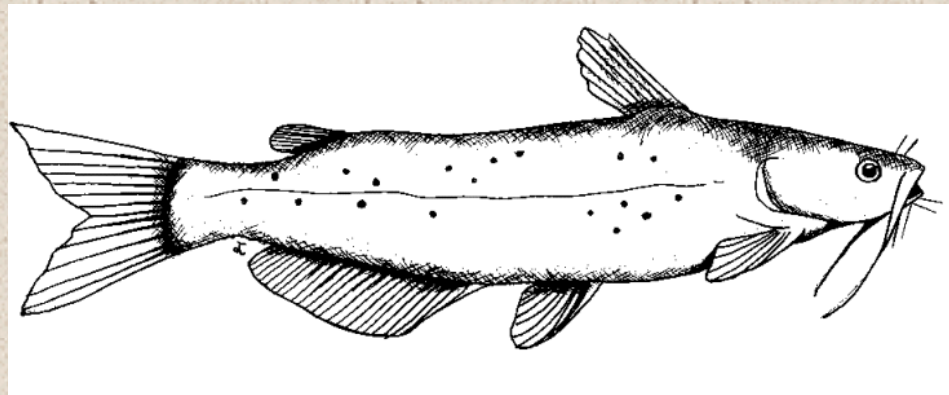


11 a. Caudal fin heterocercal or abbreviated heterocercal.....12



(heterocercal: when the vertebrae extend into the tail fin causing one lobe to be larger than the other as in a shark's tail)

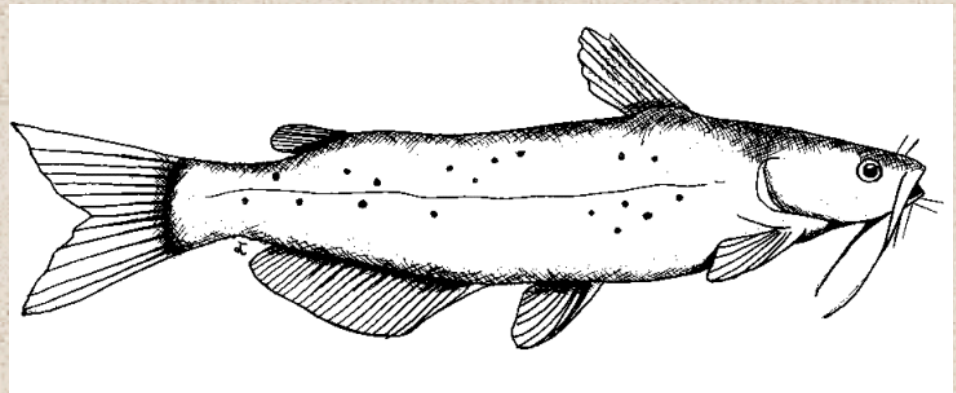
11b. Caudal fin absent or not heterocercal.....14



14a. Both eyes on same side of head.....flatfishes.. Pg 269

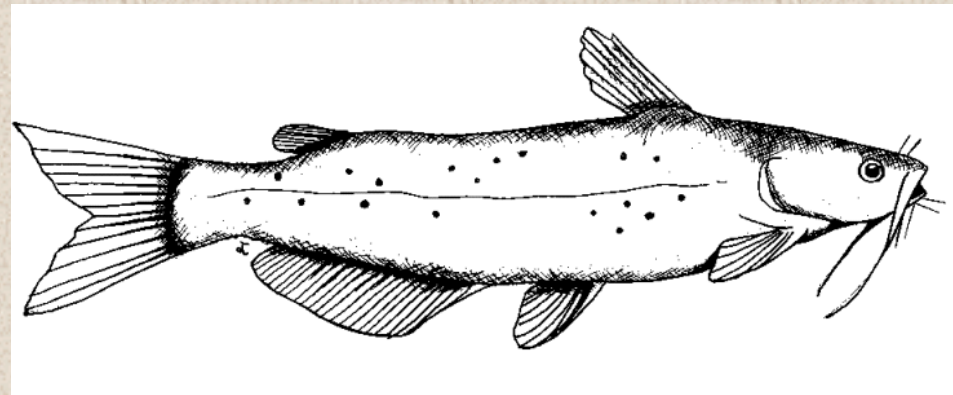


14b. Eyes bilateral .....15  
(one eye on either side of the head)



15a. Body eellike.....16  
(long and rounded like a snake)

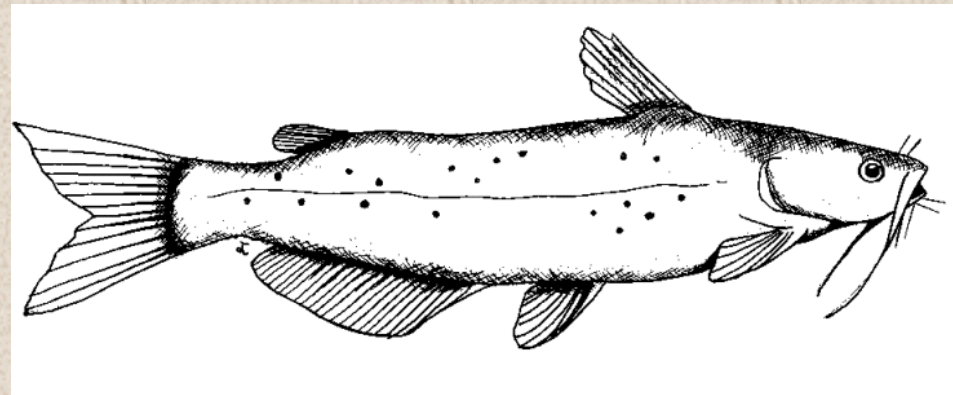
15b. Body not eellike.....17



17a. Adipose fin present.....18

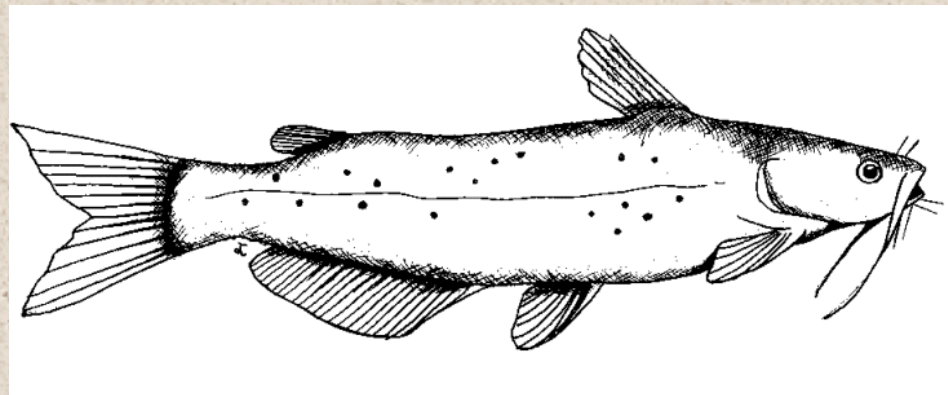
Adipose fin is a fleshy “fin” on the dorsal area

17b. Adipose fin absent.....20



18a. Barbels (whisker like appendages) present on head; spines present in dorsal and pectoral fins.....catfishes .....pg 90

18b. Barbels absent; spines absent in fins.....19

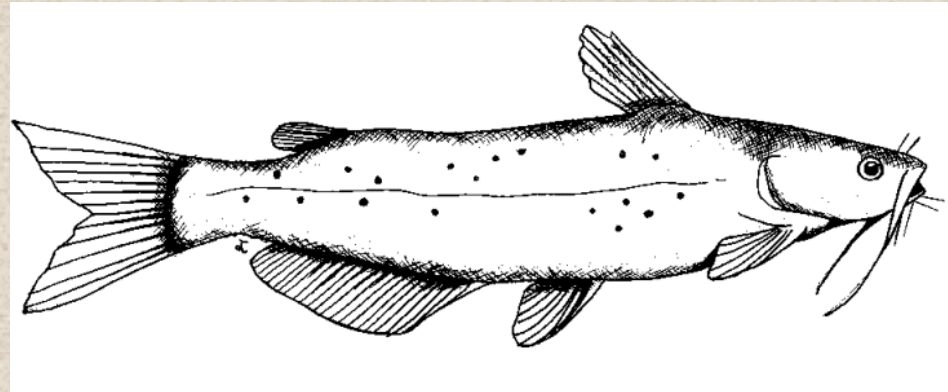


## Page 90 Catfishes

- 1a. Four pairs of barbels present around mouth.....bullhead catfishes
- 1b. Two or 3 pairs of barbels present around mouth.....sea catfishes

## Bullhead Catfishes

- 1a. Tail distinctly forked.....2
- 1b. Tail rounded, truncate, or slightly emarginate, but not forked.....4



2a. Anal fin typically with fewer than 26 rays; tail moderately forked.....  
.....White catfish

2b. Anal fin typically with 26 or more rays; tail deeply forked.....3

3a. Outer margin of anal fin rounded; anal fin with fewer than 30 rays; body typically with dusky spots.....channel catfish

3b. Outer margin of anal fin straight; anal fin typically with 30 or more rays; body without dusky spots.....blue catfish

## **CHANNEL CATFISH**

