FIELD GUIDE

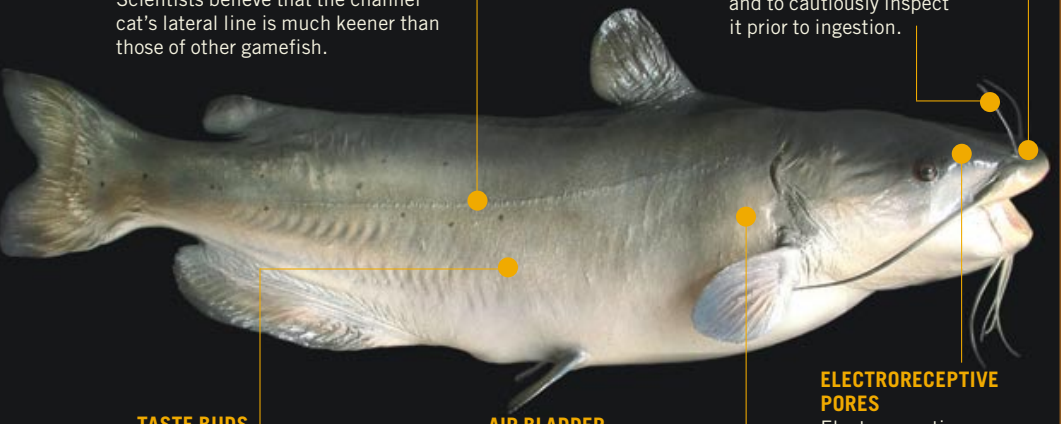
Channel Catfish

Originally found between the Appalachian and Rocky Mountains, the channel catfish (*Ictalurus punctatus*) has been successfully planted across the country and is now the nation's most abundant catfish species. A typical channel cat weighs less than 3 pounds. It is capable of reaching 50 pounds, with a potential life span of 40 years, but few specimens survive that long. The fish's extraordinarily keen chemoreceptive organs make it especially vulnerable to stinkbaits, and sportsmen pride themselves on their secret concoctions. —JACK LARSON

LATERAL LINE
A series of pores sensitive to water displacement, the lateral line picks up frequencies below the channel cat's hearing range. This includes the slightest movements of prey, predators, and even bankside anglers. Differences in the sonic pattern on either side of the fish indicate the direction from which the signal came. Scientists believe that the channel cat's lateral line is much keener than those of other gamefish.

NOSTRILS
Highly convoluted tissue in the channel cat's nostrils maximizes the surface area, providing the fish with a very acute sense of smell. Its olfactory nerve has a surface 10 times larger than that of the largemouth bass.

BARBELS:
The channel catfish uses its highly sensitive barbels to help locate food and to cautiously inspect it prior to ingestion.



TASTE BUDS
Taste buds are located not only in the mouth of the channel catfish but all over its body—more than 30,000 per square inch along its flanks, although the highest concentrations are in the mud-raking barbels. The channel cat is, in effect, a swimming tongue, capable of "tasting" objects from 20 feet away.

AIR BLADDER
The air bladder acts as a resonating chamber, amplifying sound waves and passing the vibrations to the inner ear via a tiny bone structure. This is analogous to the way a human's eardrum and inner ear bones work and elevates the fish's upper threshold of hearing to 13 times that of a bass.

ELECTRORECEPTIVE PORES
Electroreceptive pores on the head allow the channel cat to home in on the weak electric field emitted by prey. The fish employs this sense to find and root up insect larvae and other invertebrates from the mud and sand of the river- or lakebed.

PROBLEM SOLVER

WAXING ON
Reproofing waxed cotton

The last time I tried to send my waxed-cotton jacket out to be reproofed, the company licensed to perform the service wanted $40 and 11 weeks to get the job done. Needless to say, I went through that season with a pretty ragged coat. Later I watched a group of professional reproofers demonstrate their craft at a sportsman's show and picked up some expert tips that make tackling the job yourself a little easier. —TOM KEER

1. HEAT THE FABRIC BEFORE YOU WAX. Professionals use a table that is heated to 180 degrees, but you can warm the garment in the sun, on a heater, or, if you're vigilant, in an oven. It's easier to apply wax to a warm garment.

2. LIQUEFY THE WAX. If it's in a can, boil some water, put in the lidded can, and let it sit until it is fluid. If the molten wax starts to solidify while you're working, take a break and reheat it until it's easy to work with again.

3. USE A REASONABLE AMOUNT. Resist the temptation to slather it on, even if you haven't waxed your gear in a while. Lighter, regular applications are best. Cotton can only absorb so much wax, and the excess stays on the surface, gunking up anything it comes into contact with.

4. MAKE A CLOTH APPLICATOR. Cut a 10x15-inch section of an old T-shirt, fold it in half lengthwise, and roll it up. Tie it off with a string so it doesn't unravel. It's easy to hold, covers a large area if you lay it down flat, and gets into tight spots if you hold it upright.

5. SET THE WAX. When you're finished with the rewaxing process, either hang the garment in the sun or over a radiator or furnace, or warm it with a blow-dryer. This last step will really sink the wax into the cotton.

FOLK TALES IN WHICH WE SEPARATE LORE FACT FROM LORE FANTASY

THE LORE: When the wind follows the sun, the next day's weather will be fair.

THE EXPERT ANALYSIS: True "The folklore describes the wind flow (east to south to west) that accompanies the passage of low pressure north of the location in question," says Paul Knight, a Penn State University meteorologist. "Since low pressure passing north of a place turns the wind in this fashion, it usually means the passage of a warm front as the winds shift from east to southwest, and then a cold front when the wind moves from southwest to northwest. Though this should bring clouds and a risk of precipitation in the short run (the day that the conditions are observed), it is generally followed by clear skies."

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