

Do You Know?

Shadtree *trunks* are sometimes split open by excessively low temperature.

Some *gelatin* for food and emulsions is made from pigskins.

Color, according to some scientists, definitely possesses properties that make people feel warm or cold, happy or depressed.

The normal time for an *iceberg* to travel from the West Greenland glaciers to the steamer lanes south of Newfoundland is about two and one-half years.

Babies are born calcium-poor because their bones must be soft to permit passage into the outside world; after birth they need calcium-rich food, such as milk, to give strength to their bones so that they will develop normally.

A radio-controlled *lightship*, now about ready for testing in a Maryland bay, carries no permanent crew; the vessel's light, fog signal and radiobeacon will be controlled by radio from a shore station.

The highest *mountain peak* on each of the five principal continents is Everest in Asia, Aconcagua in South America, McKinley in North America, Kilimanjaro in Africa and Mont Blanc in Europe; they are listed in order of their heights.

CHEMISTRY

Chemicals Cut Swelling Of Wood from Moisture

► WOOD in window sash and bureau drawers can be protected from swelling in humid weather and shrinkage in dry periods by recently developed chemical treatments, the American Chemical Society was told at a meeting in Cambridge, Mass., by Dr. Alfred J. Stamm and Dr. Harold Tarkow of the U. S. Forest Products Laboratory, Madison, Wis.

Wood in its natural state contains a relatively large amount of empty space, chiefly in the form of fiber cavities and pores. Introduction of synthetic resins, or plastics, of the phenol-formaldehyde or urea-formaldehyde types within the cell wall structure provides bulk for the fiber walls and minimizes both swelling and shrinkage, they said.

Treating wood with a compound called acetic anhydride, a distant relative of vinegar, also bulks the fiber and reduces shrinking and swelling by altering the basic molecular structure. A type of wax that is insoluble in water may be used but the process of getting the wax inside the cell walls is complicated. Sugar and certain salts give satisfactory temporary results, but they wash out of the wood rather easily.

Science News Letter, July 24, 1948

ICHTHYOLOGY

Fish Bite When Hungry

Anger or hunger will make fish bite, but when they are full they will take no more for 24 hours. Their appetites vary from day to day, season to season.

► TO BITE, a fish must either be angry or hungry.

So says Dr. Samuel Eddy of the University of Minnesota zoology department and thus he concisely sums up the question pondering anglers for centuries.

Hunger is the main reason fish bite. Normally they start feeding early, spend the middle of the day digesting their catch and then toward evening may look around for a bedtime snack. When they are full they will take no more for 24 hours. Large fish work the hardest and longest getting their fill.

Fish appetites vary from day to day and season to season. Temperature is one factor. Fish are always hungry after spawning.

Last summer's poor fishing in many of the northern states was not due to overfishing or insufficient stocking but to abundant natural food. Instead of highly specialized diets, most fish will take whatever is available, including plants. Many eat their own young. Frogs actually are a small part of bass diet. Northerns and muskies will take almost any swimming animal they can swallow.

Most game fish locate food by sight, which is poor, otherwise they would not strike bits of wood and even pebbles. Motion is more important than details of lure structure.

Fish such as catfish, suckers and carp have well-developed senses of taste and others such as crappies, sunfish and rock bass seem to use a combination of taste and sight.

Some fish travel in schools and when one is caught there should be more. Northern pike tend to travel alone. Only artificial baits that give plenty of action should be considered.

Fishing is mainly an attempt to fool the fish into thinking a lure is something to eat. When the fish is not hungry all the art and cunning may not avail. Again, the biggest fish in the lake may pass up your luscious lure and take the worm offered by your small son at the other end of the boat.

When we cannot explain the fishes' behavior we call it luck. No doubt luck still plays an important part. If it were not for the element of luck, of the chance that you might catch the biggest fish of your life, much of the attraction would be removed.

Inventors of various devices to simplify the knack of catching fish, including calendars, almanacs, barometers and tables of moon phases and tides, probably will be unhappy about Dr. Eddy's conclusions. He implies that all this magic is refinement of

superstitions, conjured up by anglers of prehistoric times.

"Ever since prehistoric man invented the fish-hook," Dr. Eddy declares, "fishermen have tried all sorts of schemes to make fish bite it. Man soon found that sometimes he caught lots of fish and again he caught very few, and for thousands of years he has been trying to figure out why.

"First he blamed the spirits, then he figured moon phases probably were responsible, and even today you can still obtain almanacs and calendars (made out a year in advance) which tell you the days fish will bite."

As for the barometer, Dr. Eddy points out that a fish swimming a few feet up or down will encounter far greater pressure changes than normal atmosphere fluctuations. The fish has in his body a sort of barometer—an air bladder for buoyancy which is sensitive to pressure.

"So the real reason a fish bites," the fish expert asserts, "is because the fish is either hungry or mad."

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GENERAL SCIENCE

New German Science Group Honors Max Planck

► GERMAN SCIENTISTS have organized a new group, the Max Planck Society for the Advancement of Science, to replace the war-ruined Kaiser Wilhelm Society. Its first meeting was held recently at Goettingen in the British Zone, famous for the university where much of the physical and mathematical research that eventually led to the development of atomic energy took place.

Prof. Max Planck, for whom the society is named, in 1918 received the Nobel Prize in physics for his development of the quantum theory, which is basic to much of later development in theoretical physics, especially in the field of light. He died at an advanced age in 1947.

The Max Planck Society is expected to operate throughout Bizonia, and is open to the adherence of all research institutes and other organizations who choose to become affiliated. It guarantees unfettered freedom of research to all component institutes, subject only to the Control Council's regulations on scientific research. It is expected that about 25 organizations, formerly members of the Kaiser Wilhelm Society, will join.

The well-endowed Kaiser Wilhelm Society was organized in 1911, and at the outset was scrupulously kept free of all