

METEOROLOGY

Fewer Icebergs This Year

Temperature readings in Gulf Stream indicate that the number of icebergs that peril ships sailing the North Atlantic trade routes will drop below the usual 400.

► FEWER ICEBERGS than usual will plague U. S.-European shipping this year, Louis A. Post of the U. S. Navy Hydrographic Office predicted to SCIENCE SERVICE.

Mr. Post, who bases his predictions upon temperature recordings taken in the Gulf Stream off Key West, Fla., said that all indications point to a light iceberg year. He cautioned, however, that icebergs may appear in the shipping lanes in the latter part of the season, which is from March through June.

Usually each spring, 400 or more icebergs invade the trade routes of the North Atlantic, menacing international shipping. The towering, floating white mountains drift southward from their birthplace along the coast of Greenland. A heavy invasion means that the shipping industry must re-route freighters and liners south, out of the danger area.

Mr. Post, whose studies are made independently of the Hydrographic Office, discovered that the water temperature off Key West provides an annual key to the iceberg crop. He found that when the water is warmer than usual early in the same year, bumper crops can be expected. He also found that colder than usual water at Key West meant heavy iceberg invasion three years later, the time required for water at Key West to make the circuit around Baffin Bay and reappear as the Labrador Current off the Grand Banks at Newfoundland.

Using his formula for his 1955 prediction, Mr. Post said that early in 1952 monthly surface water temperatures at Key West averaged one to two degrees Fahrenheit above normal. This means, he pointed out, that the Labrador Current will not be carrying the icebergs as far south as usual. He also reported that in January and February of this year the water was one to three degrees below average indicating the Gulf Stream will strongly resist the penetration of icebergs into the shipping lanes.

The Gulf Stream began to weaken last month, however, and icebergs may drift farther south towards the end of the season.

The currents in which the deceptive icebergs move are part of the great Gulf Stream system, which extends deep into the Arctic along the West Coast of Greenland on which most of the iceberg-forming glaciers are situated. The iceberg-laden stream then returns southward along the coast of Labrador where it is known as the Labrador Current.

The Labrador Current and the Gulf Stream meet at the Grand Banks off Newfoundland in the region referred to as the "cold wall." It is in this region that the

greatest temperature contrasts in the world are to be found. And it is not unusual for a sailor to be swimming in the warm tropical Gulf Stream and watch an iceberg float nearby in the Arctic current.

Icebergs are also spotted and tracked constantly by the International Ice Patrol, whose creation was spurred by the most celebrated iceberg disaster in history, the sinking of the Titanic on April 14, 1912.

Science News Letter, April 30, 1955

PSYCHOLOGY

Loud, High Sounds Confuse Up Sensation

► DOES THE noise of his airplane disturb the pilot's perception of which way is up?

This question is raised by a report to the Eastern Psychological Association in Philadelphia.

In an experiment conducted by Dr. Kenneth A. Chandler of the University of Bridgeport, Bridgeport, Conn., nearly 50 male and female college students sat erect in the dark and told an examiner how to adjust a luminescent rod so that it appeared to them to be vertical. Meantime they were exposed to loud and high-pitched sounds.

The louder the tone, Dr. Chandler found, the more the rod might be tipped to be accepted by the subject as straight up and down.

Great individual differences were found in the ability to perceive the vertical. There were differences also in the extent to which the loud sounds would disturb this perception.

Science News Letter, April 30, 1955

MEDICINE

Food Without Exercise Makes Middle-Aged Fat

► TOO MUCH food without enough exercise is what fattens bodies and arteries of middle aged men, causing "significant hardening of the arteries."

Studies showing this were reported by Dr. George V. Mann and Misses Katherine Teel, Olive Hayes, Ann McNally and Dorothy Bruno of Harvard School of Public Health, Cambridge, Mass., at the meeting of the Federation of American Societies for Experimental Biology in San Francisco.

In the study, the periods of vigorous youth and sedentary middle age of the average man were capsuled into 10 weeks for four 24-year-old men. The four were put on a big-meal, heavy-exercise routine, typical of young adults, and then shifted to the

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big-meal, light-exercise routine of many mature businessmen. They all put on fat. When their meals were cut back to moderate supplies of calories, commensurate with the moderate exercise of middle-age, they stopped putting on weight.

The three who completed the schedule reported they could stand cold weather better and were feeling well, relaxed and rugged, slept better and worked more efficiently, during the period of big meals with strenuous exercise that kept their weight to within five pounds of normal.

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MEDICINE

Thin Old Bones Made Strong by Sex Hormone

► WHEN OLD people, especially women, complain of backache, they may be suffering from a "thinning of the bones" called osteoporosis.

Sex hormone treatment remedies the condition, Dr. Gilbert S. Gordan of San Francisco reported to the American Academy of General Practice in Los Angeles.

The vertebrae in the lower back are especially likely to be affected by this bone thinning and often they break because of it.

The disorder results from inadequate formation of protein tissue of the bones, Dr. Gordan explained. The fundamental reason is that the chief stimulus to formation of bone tissue is the action of the sex hormones. When these are no longer present, either because of age or because the ovaries have been removed by operation or destroyed by X-ray treatment, osteoporosis develops.

Simple replacement of the missing hormones therefore gives good results.

Science News Letter, April 30, 1955