

From Dr. Wetmore's observations, it would seem as if the bulk of the migratory bird population contrived to pass south with the coming of fall to the northern hemisphere and to follow the advance of the southern spring south of the Equator, remaining in their winter location through the southern summer. With the coming of colder weather in February and March they withdraw northward to their breeding grounds in the United States and Canada, thus managing to live in a Palm Beach atmosphere of eternal spring and summer.

MOON VISIBLE DURING POLAR WINTERS

The six months night which residents near the north pole enjoy during the winter, and which will soon come to an end, is not as dark as it might seem, for they have the moon above the horizon for two weeks at a time. To an observer at the pole, it would be seen to rise at the first quarter, would wax to full and wane to last quarter again before it set below the horizon. This is because of the fact that when the moon is full, it is on the side of the earth directly opposite the sun. This can be verified by anyone, for when the moon is full, it rises as the sun sets, and is on the meridian, directly south, at midnight. At first quarter the moon is directly south as the sun sets, while it sets at midnight; and at last quarter, Luna appears above the eastern horizon at midnight.

During the autumn and winter months, while the sun is south of the equator, it is not visible at the north pole, but it is not dark all of the time, for the sun must be about 18 degrees below the horizon before the sky is actually dark. When it is less than 18 degrees, twilight occurs. During the past winter, the sun was below the twilight limit from November 14 to January 29, making a total of only about two and a half months of actual night. With a bright moon during half of this time, the pole has a total of only a little over a month of actual darkness during the year. However, there is less heat in the winter, and so arctic explorers find the summer most comfortable for their work. Perhaps the day will come, however, when the transpolar air route to Europe and Asia will be popular, since the light will make possible flying at all times of the year.

STUDIES "HEARING" OF UNSPOKEN WORDS

How we "hear" words that are never spoken is being studied by Prof. J. E. Coover, of the department of psychology at Stanford University, who for over ten years has been studying psychic phenomena. When fragmentary sentences are spoken the hearer, who has heard such sentences complete in the past, unconsciously supplies the missing words. Somewhat similar is the process when a person is heard over a telephone line with poor connections, or when at a great distance, for not all sounds carry with equal facility.

In Prof. Coover's experiments to determine just how many sounds unsaid may be heard, or rather how sounds emitted are not heard, but are "supplied" by the second conversationalist, he employs the English language, utilizing 200 consonant sounds, or "nonsense syllables". Half of these begin with a vowel, half with a

consonant. Those beginning with a vowel end with a consonant, and vice versa.

Because he has noted that initials and numbers are understood with greater difficulty than completed sentences, he tries the fragmentary sounds, having one individual speak them through an air space, a closed door, telephone or dictating machine.

He mixes the sending, some "straight language" with the nonsensical syllables. If the listener hears all of the language but does not understand the single syllables, it shows, according to this scientist, that much of the dictation is "supplied by the brain."

OYSTERS GROW BEST IN HARBORS

"Back to nature" is the slogan of the experts who are trying to coax the oyster back to its old time productivity. Oysters live, thrive, increase, and multiply best in the brackish waters of our coastal estuaries and harbors, according to H. F. Prytherch of the U. S. Bureau of Fisheries. At the experimental shellfish laboratories at Milford Harbor, Conn., experiments have been made to determine if oysters cannot be induced to become as plentiful in their native haunts along the New England coast as they were in the days of Massasoit and Miles Standish.

The oyster spawn is microscopic in size and for two weeks exists in a free swimming larval state carried hither and thither by the waves and the tide. The great key note of oyster culture is to get the largest number possible of the baby oysters to "set" upon some stationary object at the end of the free swimming stage. Once set the oysters cannot move of themselves. The full grown marketable adults can readily be collected from whatever planted material, usually old oyster shells, has been used to catch the young ones or "spat"

At Milford Harbor for the past four years many experiments have been carried out in the study of the life history of the oyster, particularly the free swimming stage. Very few larvae are found in the water in the interval between spawning and the time for them to set. The investigations this summer show that the larva lives part of the time on the bottom during this period, pulling itself along by means of a muscular foot, like a clam. This interesting discovery has enabled investigators to understand much better the relationship of spawning beds and setting areas and the effect of tides and currents on distribution.

Rocks, shells, glazed tile, and objects of many sorts were tried out as collectors for the "spat". Birch brush, bearing dozens of tiny oysters planted in rows in the tidal flats, presented the aspect of what might be called an oyster garden. The outstanding results of the summer's work show that millions of seed oysters can be produced when natural conditions of breeding are reproduced. Protection of these inshore areas is essential if the oyster is to continue to be a delicacy of the American table.

Thousands of dollars have been spent by commercial enterprises sowing oyster shells to collect seed oysters, with steadily decreasing results. In years past