

ORNITHOLOGY

Biggest Eggs Taste Best

Small birds' eggs tend to fall in the "relatively unpalatable" group, according to tasting experiments on the flavors of all species and sizes.

➤ **BIGGEST** eggs taste best; littlest eggs are most likely to be bitter.

This general rule covering the flavors of birds' eggs of all species and sizes is derived from tasting experiments made under the direction of Dr. Hugh B. Cott of the University Museum of Zoology, Cambridge, England. Eggs of 81 species of domestic poultry and wild birds, ranging from hen to wren, were sampled by a panel of three judges.

These three men, Dr. J. Brooks, H. P. Hale and Dr. J. R. Hawthorne, had had wartime experience as food tasters in connection with Britain's large-scale purchases of food supplies, so they brought educated tongues to their task. All eggs were served scrambled and steam-cooked, and no species was known in advance to the judges, except the high-grade hens' eggs served as flavor standard or control. Each judge had a chance to sample all species of eggs at least twice during the test period.

By this critical but impartial method of judging, eggs of several species of gulls were rated just under hens' eggs and just over guinea-fowl eggs, but several grades better than eggs of the domestic turkey; though all were in the group pronounced "relatively palatable". A few birds with small eggs, like hedge-sparrow, bullfinch and rock-dove, managed to get into this group.

By far the largest number of small birds' eggs, however, gravitated into the "relatively unpalatable" group. Here

were eggs of such birds as linnet, white-throat, reed warbler and blackcap. At the very bottom were eggs of the common wren, with a rating only one-fifth as high as that of the best hens' eggs.

Eggs of intermediate taste, neither very good nor very bad, included such familiar species as magpie, pheasant, domestic duck, swallow, blackbird, cowbird and catbird.

Birds' diets seem to have little relation to the palatability of their eggs. Thus, eggs of fish-eaters like the gulls and terns ranked near the top, and were not noticeably "fishy" to the taste. Again the scavenger carrion-crow was rated as producer of "intermediate" eggs, actually slightly better than those of pheasant or duck, while the cleanly wren's eggs were least tasty of all.

Some effort was made to test egg-eating animals' tastes, by offering them choices between two kinds of eggs. The animals used—rats, ferrets and European hedgehogs—showed roughly the same preferences as did the human tasters, though there was some disagreement. Closest agreement came over eggs nearest the bottom of the list, which human tongues found bitter. Dr. Cott suggests that bitterness of eggs may have some survival value to birds under natural conditions, by causing possible nest-robbers to turn aside and seek food elsewhere.

Details of the test are discussed in the journal, *Nature* (Jan. 3).

Science News Letter, May 15, 1948

RESOURCES

Oil Shale Good for Fuel

➤ **MOTOR** fuels from oil shale should be given an early place in the production of synthetic liquid fuels. Coal and natural gas have other uses. Oil shale has none. Any fuel recovered from it is a net addition to national fuel resources, with no waste involved.

This is the opinion of R. M. Bartlett, vice president, Gulf Oil Corporation, Pittsburgh, expressed to the Fuel Oil Distributors Association of New Jersey. At present, he said, production of synthetic fuel from natural gas has the dis-

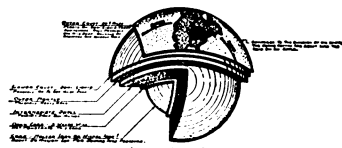
advantage of losing about half the heat value of the gas in the process. In the production of motor fuels from coal, about 60% of the heat value is lost.

Synthetic fuel research is urgent, he stated, to conserve American crude oil reserves and as insurance against the possibility of foreign supply being cut off by war. Present research projects will require about three years to complete. The building of commercial plants should be delayed to take advantage of the technical advances that will be made.

Mr. Bartlett urged the immediate extensive development of pipe line and tanker transportation for oil mined in the Arabian-Iran-Iraq area. He urged also the construction of refineries in Europe under the European Recovery Plan. This would help make Europe self-sufficient in satisfying its oil needs.

In view of the present shortage of steel, the Middle East offers an advantage. For each ton of steel used, from five to ten times as much oil can be produced. This is because of the comparatively shallow wells and the tremendous volume of oil per well. The average daily production of crude in the United States is about 12 barrels per well; in Venezuela, about 250 barrels; and in the Middle East, about 4,000 barrels, he asserted.

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