

OCEANOGRAPHY

Deep-Sea Explorers Get Guide to Naming Finds

➤ EXPLORERS of the ocean depths have been turning up so many new peaks, ridges, basins, seamounts and other underwater landmarks that naming them all has become a major problem in the flourishing science of oceanography.

Wading into the problem, the British National Committee on the Nomenclature of Ocean Bottom Features has come forth with a list of 15 rules to guide the deep-sea pioneers in naming their finds in a systematic manner.

The first rule holds that no feature should be named without adequate reason.

If the new find must be named, then wherever possible it should be linked with some geographical area, such as the "Aleutian Basin," for a basin found near the Aleutian Islands. Explorers should avoid calling their discoveries after personal or ship names, reserving these for items like deep soundings of the ocean floor.

A description of undersea bodies can often be given by using paired names. Thus, the name Atlantic-Antarctic Ridge shows at a glance the extent and location of the structure. The first part of the name should designate either the western or northern end of the body.

The number of names can often be cut by using the same label for nearby structures: Aleutian Ridge, Aleutian Basin, and Aleutian Trench.

If this system of undersea naming is adopted, the old "law of priority," which says that the first name given a structure must be held to, will be tossed overboard where the old label does not fit the new rules.

John D. H. Wiseman and Cameron D. Ovey report the Committee's recommendations in *Deep-Sea Research* (1955, Vol. 2).

Science News Letter, August 27, 1955

AGRICULTURE

Chemical Controls Parasitic Weed

➤ CHEMICAL ATTACK is proving effective in controlling the parasitic weed, dodder, a major pest in alfalfa fields of the West and especially troublesome to alfalfa seed growers.

Spraying with the chemical herbicide CIPC just as alfalfa begins to grow in the spring delays dodder sprouting by about a month, the U. S. Department of Agriculture reports. This delayed sprouting, in turn, cuts the number of dodder plants that grow to maturity, form seeds and reinfest the fields the following year. Holding back the emergence of dodder also nets a better alfalfa seed crop.

Dodder is a parasitic weed which fastens itself to helpless host plants, devouring their nutrient materials.

Science News Letter, August 27, 1955

**These Funny Fruits**

➤ A SINGLE, shriveled corn kernel is every bit as much a fruit as the largest, juiciest Delicious apple. Acorns can also claim this title, as well as pods of peanuts, cucumbers, coconuts and blackberries.

What is it that the members of such an unlikely assortment have in common that makes botanists recognize them all as fruits?

First of all, each of these different fruits bear one or more seeds which contain the embryos of future plants. Now, in the flower the seeds are found in a small structure called the ovary. So, among all plants bearing flowers, the "fruit" is basically a transformed and ripened ovary containing seeds.

The part we like to eat in a succulent apple is really food material stored in the altered, ripening ovary of the apple blossom, which surrounds and protects the seeds found in the core. This is the basic pattern of a fruit, but many fruits differ in "design" from this picture.

For instance, with the corn kernel, the only sign of the ovary is a thin, hard coat which is tightly bound to the seed. Still, the presence of this bit of ovary coat is enough to make botanists class a kernel of corn as a true, single-seeded fruit.

Berries show interesting variations of fruit structure. Those like the blackberry, with many small "globes" on each berry, come from a single flower bearing several ovaries. Each of the globes of the berry represent one of these ovaries. Incidentally, tomatoes come from flowers with compound ovaries.

The part of the strawberry that we enjoy eating is not actually the "fruit," but is the enormously enlarged base of the flower (receptacle). The true fruits are embedded throughout the receptacle as the tiny "seeds."

Mulberries have yet another structure. They are formed from clusters of individual flowers, and each of the mulberry "globes" represents the fruits of a separate flower.

Science News Letter, August 27, 1955

PSYCHOLOGY

Predict Mental Break Of Brainwashed GIs

➤ MEN returning from Korean POW camps are likely to suffer mental breakdown or at least show psychiatric symptoms in the future.

This prediction comes from Drs. Peter S. Santucci and George Winokur of Washington University School of Medicine. They made it in the American Medical Association's *Archives of Neurology and Psychiatry* (July).

Chinese Communist brainwashing is expected to play a part in producing the mental sickness symptoms.

They suggest a brainwashing in reverse as treatment for returnees showing symptoms of mental sickness. By this treatment, the returnee would be rewarded and given reinforcement for behavior acceptable to American society.

"Brainwashing," the psychiatrists points out, "is not merely a method of indoctrination."

It is a process which can produce abnormal human behavior by setting up internal conflicts with accompanying anxiety and confusion.

The intensity of the conflict between ideas absorbed in Korean POW camps and American thinking may result in more psychiatric problems in Korean returnees than in a comparable group from German and Japanese POW camps of World War II.

The desire to avoid such a conflict may be the reason some prisoners chose to remain in China, the psychiatrists think.

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Questions

BIOCHEMISTRY—Where do birds concentrate radioactive material? p. 134.

MEDICINE—For what experiments is Pavlov well known? p. 130.

METEOROLOGY—What may be the reason for the more westerly course of hurricanes in recent years? p. 135.

PHYSICS—How many tons of granite are necessary to produce releasable energy equivalent to 10 to 15 tons of coal? p. 132.

PSYCHOLOGY—What is "brainwashing"? p. 142.

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