



First Flowers

➤ SPRING-FLOWER season, we are prone to think, is still a good month away, in the North at least. It will come, according to the reckoning of most of us, with buttercups and johnny-jump-ups and delicate but hardy little windflowers. Some of us may make a concession to pussywillows and alder catkins and the soft dark fire of the silver-maple bloom that drives early bees mad; though somehow we always reckon these as only half-flowers. A flower without either scent or colored garments hardly rates.

Yet there is one flower so impatient to be out and about its business that it is very likely to be found pushing its way up through thin snows, or cracking the crust of ice on the wet places where it grows. It meets the requirements, too: it has a colored floral envelope, and it has a scent—even though we finicky humans turn up our noses at it. It is the skunk cabbage.

The sheath of the skunk cabbage is not a petal structure at all; it is really a modified leaf enclosing an entire flower-head that may have dozens of tiny, crowded flowers on it. It is analogous to the more ornate sheaths of such plants as the calla lily and the Jack-in-the-pulpit—to which, indeed, the skunk cabbage is fairly closely related.

The odor of the skunk cabbage, though offensive to human nostrils, is given out

only in return for some initial offense. So long as the plant remains intact its scent is sealed up within it; but if it is kicked or trampled the scent escapes to tell the world of the outrage that has occurred. The early Revolutionary War flag that displayed the device of a coiled rattlesnake with the warning motto: "Don't tread on me!" might almost as well have substituted a skunk cabbage for the serpent. Only, chemical warfare hadn't been invented at that time.

All of us except the most "nose-deaf" can appreciate the appropriateness of the "skunk" part of the plant's name; but why the "cabbage"? That isn't evident now, but it will be more so later. For the skunk cabbage is one of those plants in which flowers precede leaves, being developed and

fed to maturity from reserves stored in a thick root-stock underground. Later on come the big, broad leaves, which are not unlike the free outer leaves of a cabbage plant in general outline. Like the flowers, they are highly scented; and it is at this stage of its development that the skunk cabbage most closely fits its name.

There is a third phase, that comes late in autumn or even in early winter, after strong-scented flowers and leaves have long since disappeared. You may be hiking through boggy woods, and come upon some very attractive orange-red objects, of a general egg shape, but spiky all over. These are the fused fruits of the skunk cabbage, containing the seeds that help to provide for coming generations.

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ARCHAEOLOGY

Indians Lived Underground

See Front Cover

➤ IF ATOMIC or biological warfare ever drives modern Americans underground, they won't be the first Americans to dig themselves in.

How peaceful Stone Age American Indians went underground has been unearthed in the Southwest by scientists from the Chicago Natural History Museum.

These early underground Americans apparently holed up without any threat of war. The history which is being pieced together of the roving Stone Age Cochise Indians and the Mogollones who built pit-houses in southwest New Mexico is strange compared with most history. These Indians, it appears, spent 6,000 years at peace.

Dr. Paul S. Martin, who led the expedition into the Southwest last summer, explains that the Cochise Indians apparently roamed around southeastern Arizona and southwestern New Mexico about 4,000 B. C. searching for water. Only remaining evidence of these nomadic Americans yet found was 12 feet below the surface at a flowing spring called West Leggett in southwest New Mexico. Here the Chicago scientists discovered Stone Age tools of these ancient Indians.

What went on for the next 5,500 years is pretty much a blank. But about 500 A. D., the oldest known pit-houses of the Mogollones were built, or rather dug.

They were simply a cellar with a roof. The "last word" in pit houses has been designated Pit-house K. It is approximately 28 by 28 feet and about four feet deep. The scientists speculate that "K" was probably at least a chief's home, and more likely a ceremonial chamber, as shown on the cover of this week's SCIENCE NEWS LETTER.

Five husky modern workmen needed two weeks to excavate the pit, and it must have taken the primitive Indians at least twice as long to build it, not counting the

preparation of the logs which supported the roof.

For nearly 500 years, the Indians of the Southwest lived in pit-houses. Then, about 1,000 A. D., they began to emerge and live on the surface in pueblos.

Why these wanderers dug into the earth and for five centuries lived in cellars is one of the mysteries the scientists hope to unravel with more discoveries in the ancient home of the Cochise and Mogollones.

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ENTOMOLOGY

Tailor-Made Weather Will Test Insects' Endurance

➤ WEATHER like this winter's in the West, or like next summer's in Death Valley, will be made to order in new entomological laboratory facilities now under construction at Michigan State College in East Lansing, Mich. Extreme temperature conditions over a wide range of humidities will be used in testing the endurance of insects.

The idea is to find out what conditions are most likely to discourage various species of insect pests, so that man can make a more effective ally of General Winter in the endless defensive warfare he has to wage to keep his place on this bug-be-leaguered planet.

Conversely, conditions favoring useful insects will also be useful knowledge, for man's use in keeping his small friends alive and active.

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Large unexploited deposits of oil are thought to lie under Louisiana's bayous and marshes.

Indonesia is now the official name for what was long known as the Netherlands Indies.

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