

## METEOROLOGY

# Indian Summer Days

Season of "stalled" air movement and warm weather often coincides with Hallowe'en, and is called after St. Martin in Europe.

## See Front Cover

► **FIRST SHARP FROSTS** came early this year over a wide stretch of this country; Indian summer arrived correspondingly soon. The quiet, warm autumn days, with calm air or, at most, moderate, drying winds, are good for hastening the maturing of the crops. They dry the last surplus water out of corn, beans and other seed crops, mellow late apples and pears, and put the finishing touches on pumpkins and hard-shelled squashes left orphans by their frost-killed vines.

There is no fixed date for the arrival of Indian summer, no definite duration for the season. It is not even necessary that a killing frost come first, though that is a usual preliminary. Any warm, quiet spell, following cool or chill fall weather, may be called Indian summer. In some fortunate falls there may be more than one such season.

Meteorological background for Indian summer is a "stalled" high-pressure area somewhere in the Southeast, with a large area of low pressure backed up in or near the Yukon valley. There will then be little air movement off the main body of the continent, and even the low-angled autumn sun can warm up the air. Sometimes Indian summer temperatures rival those of actual summer: 90-degree days are not uncommon, though nights are always cool.

Only in the English-speaking parts of North America is the name Indian summer used. Similar seasons in Europe have names dating back to the Middle Ages, ascribing them to various autumnal saints; usually St. Martin, whose feast comes on Nov. 11. Very often the season coincides with Hallowe'en, which was originally another day of religious observance, being the Eve of All Hallows, or All Saints' Day.

The ancient Greeks had a belief that these calm spells were a gift of the gods for the special benefit of the kingfisher, whose name in Greek is halcyon. The kingfisher was supposed to build a floating nest on the sea, and to sing sweetly to its brood; whence the phrase "halcyon days."

Actually of course the kingfisher builds its nest in a burrow in the stream or lake bank, and is not at all notable for vocal virtuosity. However, that's just some more of cold-blooded modern science's upsetting of pleasant old fancies.

The glistening gossamer threads that float through the air and catch on trees and shrubbery during Indian summer are a source of mystery to many persons. They look just like spiderweb, only you don't see any spiders.

Actually they are spiderwebs, and if you look sharp, at the right time, you may see the spiders. But as a rule you'll have to get up fairly early, and on just the right days. Very tiny spiders, recently hatched, climb out on the ends of twigs, when very gentle air-warmed currents are rising. They spin these thin threads each with a tiny parachute-like tuft at its end. When the lift becomes great enough, away they sail, seeking their fortunes like true Argonaut adventurers. It is the method of migration-dispersal followed by these spider species.

These glistening threads, too, were the source of an old folk-belief. It very likely is older than Christianity; but at present, and for many generations past, peasants in the Catholic parts of Europe call them various names that all translate as "Mary's threads." Because they are so delicate, and perhaps because they have a bluish glint in the autumn sunlight, they are supposed to be ravelings from Our Lady's veil, drifting down like a benediction on a quiet world.

*Science News Letter, October 31, 1942*

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