A Science Service Feature

Released upon receipt
but intended for use
July 24, 1935

? WHY THE WEATHER ?

Mailed July 17, 1935

VARIOUS RAINBOWS

By Charles Fitzhugh Talman,
Authority on Meteorology

It is a common mistake to suppose that rainbows are all pretty much alike, so that they are hardly worth careful observation. They are, however, quite variable in their colors and in other respects. Large raindrops produce narrow and brilliantly colored bows; those formed by small drops are broad and faintly colored, and the tiny droplets of a fog produce the so-called "white rainbow," or "fog-bow," which is almost colorless. Besides the ordinary double rainbow, consisting of the primary below and the secondary above, one can distinguish in perhaps a majority of rainbows one or more repetitions of the rainbow colors along the inside border of the primary, and they are sometimes also seen just outside the secondary. These are called "supernumerary" bows.

Some of the most vividly colored rainbows are seen in the jets of a lawn-sprinkler. Beautiful "spray-bows" are formed at waterfalls and also in the sheet of spray looked down upon from the bow of a steamer. Whenever your eye is above the layer of drops forming the bow, you may get a sight of the "horizontal" rainbow, which appears to lie over the ground, and if the sun is high in the sky this will take the shape of a complete circle or ellipse. A newly sprinkled grassplot at midday is a good place to see a horizontal bow.

(All rights reserved by Science Service, Inc.)

SCIENCE SERVICE
2101 Constitution Ave.
Washington, D.C.