

## Do You Know?

Oil was extracted from shale in Scotland as early as 1694.

The peel of *apples* is five times as rich in vitamin C as the flesh.

In 1942, a total of 2,808,996 *births* and 1,385,187 *deaths* were registered in the United States.

Applications for *air routes* from the United States to the other Americas have been filed by 25 companies.

*Battlescrap*, salvaged from battlefields and elsewhere, is becoming an important source of raw materials, particularly of metals.

Two species of *Sequoia* are all that remain today of some 45 species described from fossil beds in the Northern Hemisphere.

*Butter* is a mixture of milk fat, water, casein, salt, lactic acid, and coloring; federal standards call for at least 82.5% butter fat and not over 16% water.

"*WASPS*," civilian flyers of the Women's Airforce Service Pilots, have averaged 3,000,000 flying miles per fatal accident; they are now flying approximately 5,000,000 miles a month.

The fight against *tuberculosis* in the United States is making rapid progress; the mortality rate was cut in half during the first 20 years of the present century and halved again by 1940.

*Radio telephone* service is now open between the United States and Trinidad, the most southerly island of the West Indies; it is handled through short-wave telephone facilities at Miami, Fla.

*Carnauba wax* from Brazilian palms, formerly used in lipsticks, phonograph records, furniture polishes and for other purposes, is now used as a water-proofing and protective coating on war materials.

*Muskrats* are able to swing their lower jaws forward to sharpen the lower teeth against the upper, and the upper against the lower; the teeth are curved and grow continuously and must be kept worn away and sharpened.

## From Page 203

they, too, would leave forever. We on earth are more fortunate. The velocity of escape—the speed at which a bullet would have to be fired to leave our planet—is 7.5 miles per second, considerably higher than the average speed of our air molecules, so that is why our atmosphere stays with us.

Just as the moon always keeps the same half toward the earth, so Mercury always has the same hemisphere facing the sun. The result is that this part is hotter than any other planet, or about 770 degrees Fahrenheit, as measured by Drs. Edison Pettit and Seth B. Nicholson at the Mt. Wilson Observatory. Lead and tin both melt at this temperature. On the other hand, the dark side is exceedingly cold, close to the absolute zero of space, since there is no circulating atmosphere to warm it. And so Mercury has the unique distinction of having both the maximum and minimum temperatures among the planets.

As it did earlier this year, on Jan. 13, the moon will pass in front of Jupiter and "occult" it on April 30, but unfortunately it will take place between the hours, approximately, of 4:00 and 5:00 p. m., EWT, which is

during daylight. Thus, it will hardly be visible to the unaided eye (as it will be in Europe, where it occurs at night), but a small telescope will show the moon approaching the planet, and Jupiter's reappearance as the occultation ends. That evening, of course, the two bodies will still be close together. The moon will be about at first quarter. As it moves toward the east, the planet will be hidden by the dark edge. All over the United States and Canada the occultation will be observable, except that along the west coast the hiding of Jupiter will take place before the moon rises.

## Celestial Time Table for April

April	EWT	
3	9:39 a.m.	Moon passes Jupiter.
4	2:00 p.m.	Moon farthest: distance 252,000 miles.
8	1:22 p.m.	Full moon.
12	6:00 a.m.	Mercury farthest east of sun.
13	3:00 a.m.	Jupiter changes from westward to eastward motion.
16	1:59 a.m.	Moon in last quarter.
20	10:00 a.m.	Moon nearest: distance 225,900 miles.
21	early a.m.	Meteors of Lyrid shower visible.
	7:18 a.m.	Moon passes Venus.
22	4:43 p.m.	New moon.
26	8:24 a.m.	Moon passes Saturn.
28	4:33 a.m.	Moon passes Mars.
30	2:06 a.m.	Moon in first quarter.
	4:30 p.m.	Moon occults Jupiter.

Subtract one hour for CWT, two hours for MWT, and three for PWT.

Science News Letter, March 25, 1944

## METEOROLOGY

# Maps of World Climates

➤ SUPPOSE your regiment has been ordered to Timbuktu or Kamchatka or some other outlandish place you've hardly ever heard of. How can your supply officer be sure you and your buddies will be dressed and outfitted to be comfortable in the climate they will meet there?

A glance at the series of new monthly climatic maps of the world prepared by the Army Map Service will go far toward solving the problem. These maps show what kind of weather may be expected, on the average, each month in the year over all six of the world's continents. Each kind of climate is shown by a distinctive color, so all you need to do is find a matching color on the map of North America or other familiar region, and plan accordingly.

Thus, Timbuktu in June is colored up like western Texas in July. You'll find the same color around Darwin, in northern Australia, right now—it's still high summer in the southern hemisphere.

By matching colors on these new

maps, the supply officer will learn that Tokyo weather is virtually identical with that of Washington, D. C.; that the terrific Russian winters are about like normal winters in northern Minnesota, North Dakota or Maine; that the city of Duluth is climatically about on a par with Leningrad; and that Bismarck, N. Dak., has a climate similar to that of Moscow.

This newly developed monthly breakdown replaces the very general system of dividing the world into yearly regional climates. Presenting complete information on the rainfall, temperature and humidity, the maps are an invaluable aid in the determination of types of clothing and equipment for our fighting forces stationed at distant and heretofore relatively unknown and uncharted regions.

Looking into the future, Major W. F. Heald of the Climatological Unit of the Quartermaster Corps predicts a very practical peacetime use of these maps when pleasure travel is again in order.

Science News Letter, March 25, 1944