

INTELLIGENCE FROM AMERICAN SCIENTIFIC STATIONS.

GOVERNMENT ORGANIZATIONS.

National museum.

A new sperm-whale. — The Smithsonian institution has recently received from Life-saving service No. 84, at Spring Lake, New Jersey, a very valuable specimen of a pygmy sperm-whale of the genus *Kogia*. This is apparently the first instance of the discovery of a cetacean of this genus in the North Atlantic. Five species have been hitherto described, — three from the Australian waters, one from the Cape of Good Hope, and one from the Gulf of California. The recently acquired specimen differs from *Kogia Floweri*, apparently the most closely allied species, in having less incurved teeth, longer pectorals, a higher dorsal, and the symphysis of the lower jaw more convex below. It may be denominated *Kogia Goodei*.

The specimen has been photographed and cast, and the viscera have also been preserved. The animal proved to be with young, the foetus measuring about three feet in length.

F. W. TRUE.

Bureau of ethnology.

Prehistoric remains in North Carolina. — Mr. John P. Rogan and Dr. J. Mason Spainhour have made some important finds of antiquities in North Carolina. In one mound they found there had been sixteen persons buried, ten of them in stone graves or cists, not of the usual form, but built up in a conical shape of small stones, arched over, and closed at the top. In nine of these the skeletons were sitting upright. It appears, that before the burial the ground, to the full size of the mound, had been excavated to the depth of about three feet; the bodies were then placed in a sitting-posture, and the stone tombs built over them. At the centre, a small round hole had been dug some three feet deeper, a body had been placed therein in a standing-posture, and the tomb built up around it so as to cover the head; the capstone being a large piece of steatite. Immediately under this, on top of the head, were several plates of cut mica. At one point in this mound was found an oblong structure, 24 inches long, 18 inches wide, and 18 inches high, built up solidly of river-stones. No implements or other articles, except a few broken pipes, were found in this mound.

A short distance north of this was discovered a triangular enclosure filled with graves, some of them incased with stone, others not. In some of these graves there were two skeletons, one placed above the other; the lower one in each case being of small stature, with very heavy flat stones placed on the arms and legs.

In one large grave were found ten skeletons, the principal one with the face downwards. Under his head was a large engraved shell; around his neck, the remains of a necklace of large-sized beads; at each ear, pieces of copper; around each wrist, bracelets composed of copper and shell beads; on his breast, a piece of copper; at his right hand, two implements of hammered iron; under his left hand, an engraved shell filled with beads of various sizes. The other nine skeletons were arranged around this one, extending in all directions; under two of them were also found engraved shells. Scattered over the area were found a number of stone axes, polished celts, descoidal and rubbing stones; a number of steatite pipes highly polished, with bowl and stem of one piece; also copper arrow-heads, plates of mica, graphite, etc.

These articles have all been received by the bureau. The same parties have since opened another mound, in which were found fifty-five skeletons, four or five engraved shells, copper beads, a piece of hammered iron, pots, cups, one tomahawk, a number of stone implements, about a dozen pipes, mica, galena, etc.

Department of agriculture.

Artesian wells. — The work under the department for the sinking of artesian wells in the arid lands of the west, is going steadily on. A recent report from artesian well No. 1, at Akron, Col., gives the following state of affairs, — Feb. 23, a depth of 925 feet had been reached with 1,063 feet of casing in, as follows: 100 feet of 10-inch, 293 feet of 8-inch, and 670 feet of 6-inch. The character of the formations has been, 10 feet clay and gravel, 10 feet gravel, 10 feet, of a chalky deposit, 50 feet conglomerate (sand and gravel), 8 feet hard sand rock, 20 feet chalky rock 12 feet gravel and clay, 92 feet dry black clay, 10 feet sandstone, 113 feet blue slaty shale, 570 feet shale. At 50 feet a small amount of water was found, at 100 feet the water rose 15 feet, at 128 feet it rose again slightly, at 355 feet there was a rise of 80 feet, and at 540 feet the water rose again 305 feet.

STATE INSTITUTIONS.

Ohio meteorological bureau, Columbus.

Weather report for March. — The atmospheric pressure was generally less than for any month yet reported by this bureau. The maximum barometric height (30.619 inches), the mean (30.060 inches), and the minimum (29.424 inches), are all less than the corresponding figures for previous months. Both the maximum and minimum are reported from the lake region, the former having been observed at Oberlin, and the latter at Sandusky.

The remarkable feature of the weather for the month was the extremes of temperature that were recorded, and the unusually low mean for the whole month over the whole state. This mean was 32.4°. In a series of temperature observations extending over periods of from six to twelve years, and fairly well distributed over the state, the mean temperature for the month of March is found to be about 38°, so that the past month must be regarded as unusually cold. The extremes of temperature are even more remarkable. A maximum of 75° is reported from Ironton on the 18th, and a minimum of 17.4° below zero at Wauseon on the 20th. This makes a range for the state of 92.4°, which is above any previously reported, and one not likely to be reached again during the year. The fall of temperature about the 18th, 19th, and 20th, was extraordinary. Wauseon reports the maximum daily range, which was 55.2° on the 18th. This station has continuously reported the lowest temperatures. During the past four months the lowest points reached have been as follows: —

	Temperature below zero.
Wauseon, December	16.4°
“ January	17.5°
“ February	12.0°
“ March	17.4°

From this it will be seen that the temperature

reached on March 20 was only one-tenth of a degree higher than the lowest for the season. It is hardly to be expected that Wauseon will continue furnishing such records as this. The mean daily range of temperature over the whole state was 19.2° , which is also unusually great.

The amount of precipitation during the month was less than is usual for March. The mean depth of rain or melted snow was 2.18 inches, while the mean of observations extending over several years is 3.17 inches for the month of March. Rain or snow fell, on an average over the whole state, on twelve days in the month. A thunder-storm of considerable violence, and covering a considerable area, occurred on the evening of the 14th. Westerly winds prevailed.

Missouri weather-service, St. Louis.

Weather report for April.—The average temperature of April has been 56.7° at St. Louis, which is about half a degree above the normal of Engelmann's series. Since 1837 the mean April temperature has once reached 66.8° (in 1844), and in 1857 it fell to 44.1° , a range of 22.7° . The extremes during the last month have been 32.2° (on the 24th) and 85.6° (on the 14th), which are very ordinary temperatures. In April, 1857, the lowest daily minimum was 18° ; while in the years 1838, 1843, and 1855, the highest maximum reached was 93° . In the state the maximum temperature has been the highest in the central part, Glasgow reporting 93° , Miami 92° ; while at Cairo, Ill., the highest temperature reached was 84.5° , that at Keokuk being 85° . The lowest minimum reported was 22° , at Centreville; and twelve stations out of twenty-one reported the minimum as 32° or below.

The rainfall at the central station has been 2.62 inches, the normal rainfall being 3.70 inches. At the St. Louis water-works, however, the rainfall has been 3.87 inches. The rainfall has been heaviest, or more than 5 inches, in the extreme south-eastern part of the state. In the central-western part, and in a narrow belt extending therefrom to Macon and Shelby, the fall has been less than 1 inch, while in the north the fall has been over 2 inches. At four P.M. on the 14th a severe local storm, which was apparently an incipient tornado, did considerable damage at Hannibal. Its track was about three hundred feet wide. Similar storms, with hail, were observed seven miles west and ten miles north of Mexico. A small tornado having a width of fifty to seventy feet, passed through the western part of Pleasant Hill between half-past seven and eight A.M. A portion of a rail fence was carried eight feet, and set down without materially changing the relative positions of the rails.

In the dry area of the past month, where ice-crust did damage to the wheat during the winter, additional damage has been done by the drought and high winds of the past month. At Savannah not over one-tenth of a crop is left, and farmers are planting the ground in corn. Meadow is also light. In the south-eastern part, however, the plentiful rains have repaired to some extent the damage done to wheat, and it is turning out better than was expected. Thus far the fruit-crop has not been materially injured by frost, the cool and uniform temperature having been very favorable.

State university of Kansas, Lawrence.

Weather report for April.—During this month the temperature was high, the rainfall was a full two-thirds of the normal quantity, and the cloudiness, wind-velocity, and humidity were each considerably below the averages. The only frost was a harmless

hoar-frost on the 24th. All kinds of fruit-trees were in blossom from the 10th to 30th.

Mean temperature, 57.18° , which is 3.17° above the average April temperature of the fifteen preceding years. Highest temperature, 89.5° , on 13th; lowest, 35° , on 24th; monthly range, 54.5° : mean at 7 A.M., 51.02° ; at 2 P.M., 67.7° ; at 9 P.M., 55° .

Rainfall, 2.12 inches, which is 0.92 inch below the April average. Rain fell on nine days. There was no snow. There were two thunder-showers. The entire rainfall for the four months of 1883 now completed has been 6.44 inches, which is 1.31 inches below the average for the same period in the past fifteen years.

Mean cloudiness, 40.11 % of the sky, the month being 8.80 % clearer than the average. Number of clear days (less than one-third cloudy), 16; entirely clear, 6; half-clear (from one to two thirds cloudy), 9; cloudy (more than two-thirds), 5; entirely cloudy, 2: mean cloudiness at 7 A.M., 45.67 %; at 2 P.M., 43.33 %; at 9 P.M., 31.33 %.

Wind: S.W., 22 times; S.E., 20 times; N.W., 17 times; S., 13 times; E., 3 times; W., 3 times; N.E., 12 times. The entire distance travelled by the wind was 12,936 miles, which is 1,248 miles below the April average. This gives a mean daily velocity of 431 miles, and a mean hourly velocity of 17.96 miles. The highest velocity was 50 miles an hour, on the 14th. Mean velocity at 7 A.M., 15.60 miles; at 2 P.M., 22.40 miles; at 9 P.M., 15 miles.

Mean height of barometer, 28.957 inches; at 7 A.M., 28.969 inches; at 2 P.M., 28.917 inches; at 9 P.M., 28.984 inches; maximum, 29.473 inches, on 24th; minimum, 28.289 inches, on 22d; monthly range, 1.184 inches.

Relative humidity: mean for month, 53.33; at 7 A.M., 64.7; at 2 P.M., 36.7; at 9 P.M., 58.6; greatest, 100, on 5th; least, 10.5, on 17th and 24th. There were two fogs.

NOTES AND NEWS.

The first meeting of the Ohio state forestry association was held in Cincinnati, April 25 and 26. Several papers upon tree-planting and forestry were read; the most elaborate, based upon the preliminary publications of the tenth census, being that of the United States commissioner of agriculture. The meeting, however, if we may judge from the meagre reports published in the Cincinnati papers, produced no new facts about forests or forest management, and quite failed to arouse any local enthusiasm.

It is difficult to decide how far these forestry conventions, of which several have been held during the past year or two in different parts of the country, serve the cause their promoters desire to foster. Forest preservation has become, from various points of view, a question of great national importance for the United States. Economists are properly alarmed at the prospect of a speedy exhaustion of some of our most valuable varieties of lumber, although the more serious dangers which threaten the country through the effects of improper forest destruction upon the flow of rivers and agricultural prosperity have hardly yet received proper attention.

Conventions of self-termed 'friends of the forest' have thus far failed to bring about any reform in the