

Notes on the native fish fauna of Utah: DR. VASCO M. TANNER. Utah has mainly two drainage basins, the Great Basin or Bonneville Basin and the Colorado River Basin. Twenty-nine native species, 23 introduced species, and 7 fossil species are reported.

Notes on the Catostomids of Utah: MERRILL C. HAMMOND, Brigham Young University. In the Colorado River system are found *Xyrauchen texanus*, *Catostomus latipinnis*, *C. insignis*, *Notolepidomyzon utahensis*, and *Pantosteus delphineus*. *Pantosteus platyrhynchus* is found in the Provo, Sevier and Weber Rivers. *Pantosteus virescens* is common in the Weber and Bear Rivers. *Catostomus ardens* may be a synonym of *C. fecundis*; *Chasmistes liorus* may be only a variant of *Catostomus fecundis*.

The mechanism of fang replacement in the rattlesnake: L. M. KLAUBER, Natural History Museum, San Diego, California. On each side of the head there is a pair of contiguous maxillary fang sockets. These are used alternately to hold the active fang, the immature fangs being held in a magazine in a staggered line behind the two sockets, the most mature of the future fangs being behind the vacant socket. When the time comes for a change this fang advances to the vacant socket anterior to it and becomes seated therein. The old fang drops out, leaving a vacant socket, to which, in due time, the next replacement advances.

Notes on some Washington amphibians: JAMES R. SLATER, College of Puget Sound. *Ambystoma tigrinum* has been taken in the larval condition in Sulphur Lake and Medical Lake, Wash. They are taken in large numbers at Medical Lake. *Rhyacotriton olympicus*, *Ascaphus truei*, *Ambystoma parotium*, and *Bufo boreas* were taken at Spirit Lake, Wash. *Plethodon intermedius* was taken north of any previously reported locality, near Pokum, B. C.

The Muellerian duct of the male Triturus torosus: DR. LAWRENCE E. GRIFFIN and HENRY WU, Reed College. The Muellerian duct of the male *Triturus* is an extremely slender tube which extends the length of the abdominal cavity, and has a definite lumen as far as its anterior extremity.

Infection with amphibian tubercle bacilli connected with a case of sex reversal in a frog: DR. LAWRENCE E. GRIFFIN, Reed College. A testis of normal appearance and connections replaced the right ovary. In the testis were found numerous masses of bacteria which have been identified as amphibian tubercle bacilli.

Some changes in the blood of certain Caudata, Triturus torosus, during desiccation: ALICE H. BRAMLETT and DR. F. M. BALDWIN, University of Southern California. A study made to discover the degree of desiccation as indicated by changes in concentration of blood cells, increase in specific gravity, and coagulation time. Rapid desiccation is fatal. In some cases death resulted when 32 per cent. of the body weight was withdrawn in 14 hours. When desiccation was carried out slowly, some lived 54 hours with a loss of weight of 38 per cent.

Notes on a new Cyprinoid genus, Pseudogyrinocheilus; and P. procheilus (Sauvage and Dabry) from western China: P. W. FANG, Metropolitan Museum of Natural History, Nanking, China. A detailed analysis and description of the new genus and of the species assigned to it.

An exhibition of living reptiles of Utah was prepared by Dr. Vasco M. Tanner and D. Eldon Beck.

Officers for the coming year were elected as follows: *President*, Dr. Vasco M. Tanner; *vice-president*, Dr. Tracy I. Storer; *secretary*, Dr. Arthur Svihla.

(To be concluded)

SCIENTIFIC EVENTS

BRITISH BOTANICAL EXPEDITION TO TURKEY

THE correspondent of the London *Times* from Constantinople records that E. K. Balls and W. Balfour Gourlay have returned from an expedition in Anatolia in search of plants for the Royal Botanic Gardens at Kew and in Edinburgh. They set out in March with field kit, an English-speaking chauffeur, and a second-hand car which they had bought in Constantinople. Their first objective was the Taurus region, but finding their movements there somewhat restricted by the local authorities they returned to Angora and explored the country surrounding Kirschahr, Kaisarieh, Sivas, Erzincjan and Gümüşhané. Here they found flora akin to that of Persia. At the end of May they had made their way to the Trebizonde vilayet, where the climate is less dry than in Central Anatolia and consequently the flora is more

luxuriant. There they worked until September 9 from sea-level up to 11,000 feet.

In spite of an unusually wet and late summer, Mr. Balls and Mr. Gourlay are highly satisfied with the results of their expedition. They have discovered new varieties of crocus, tulip, primula and alpine plants; rare lilies and foxgloves. Two perennial foxgloves, one white and yellow, and the other yellow and brown, and a golden autumn-flowering crocus growing on the borders of Lazistan they regard as their greatest finds. Masses of pale-blue hyacinth growing in a bog and from a distance resembling a sheet of shimmering water supplied the most striking sight of their travels.

At regular intervals during the summer they posted home seeds, bulbs and live plants, and nearly all arrived in good condition. Both spoke very warmly of the hospitality they received in all the villages they

visited. Not only did the villagers entertain them, but they also assisted them in their search for flowers and plants. Many of them showed great knowledge of plants and their use as food or medicine. Mr. Balls and Mr. Gourlay were particularly impressed by the honesty they met among the peasants and shepherds.

RUSSIAN ASCENT TO THE STRATOSPHERE

ACCORDING to an Associated Press dispatch from Moscow, government wireless stations announced on September 30 that the balloon *Stratostat* had landed safely in a meadow near Kolomna, 71 miles from Moscow, after having completed a flight which carried it 19,000 meters, or 11.80 miles above the earth for a new altitude record.

The three Russian balloonists who took off in the army balloon at 8:41 A. M. on September 30 were greeted by cheering peasants as they landed.

All issued a statement in which they said they were proud to have beaten the world's altitude record of 16,700 meters, or 10.38 miles, set by Professor Auguste Piccard in August, 1932.

Another wireless from the descending craft placed its altitude at $8\frac{1}{2}$ kilometers, about 5.3 miles, and added that the airmen expected to land in the vicinity of Bronitzky, 56 kilometers, or about 31 miles, south-east of Moscow.

The balloonists, Georgi Prokofiev, Ernest Birnbaum and Konstantin Gudenoff, had made eight previous attempts to get their craft off the ground, but this time, thanks to perfect weather, they had easy sailing.

Five messages sent while they were soaring aloft told of their rapid progress upward. About two hours, 19 minutes after they took off they wirelessly

they had bettered the Swiss natural scientist's altitude and were still rising.

They had then drifted only 24 kilometers from the straight line upward and said the equilibrium of their craft was good. They did not complain of the cold, although at that great height the temperature inside their gondola was 22 degrees below zero, centigrade, and the outside temperature was 65 degrees centigrade below.

The craft, the "U. S. S. R.," got away smoothly. Only a few persons were at the field, but thousands saw the silver-blue bag disappear shortly after nine o'clock. The crew wore heavy fur-lined, three-quarter length coats, felt boots of knee-length and regulation aviator's helmets.

The balloon is of rubberized percale and has a gas capacity of 25,000 cubic meters. The gondola, of aluminum, is ball-shaped, with nine windows. Besides radio equipment it has liquid oxygen for three men for 40 hours, and numerous natural scientific instruments which function automatically.

LIMITATION OF CASH WITHDRAWALS FOR THE DEPARTMENT OF AGRICULTURE FOR 1934

CASH withdrawals from the Treasury by the Department of Agriculture during the fiscal year 1934, as announced on June 19, will be limited to \$60,000,000 or 37 per cent. less than for 1932. This amount is for the regular work of the department and for federal aid to the states for experiment stations, extension and forestry, but does not include funds for roads or for expenditures under the Agricultural adjustment act.

The following table shows the funds allotted to the various bureaus and for other purposes:

	Appropriation 1932	Appropriation 1933	Appropriation 1934	Limitation on cash with- drawals 1934
A. Ordinary Activities:				
Office of the Secretary	\$ 1,322,115	\$ 1,206,547	\$ 1,164,561	\$ 1,029,442
Office of Information	1,420,961	1,335,800	1,226,287	916,966
Library	110,620	106,100	100,223	88,901
Office of Experiment Stations	399,410	294,294	226,961	198,670
Extension Service	1,793,560	1,688,170	1,583,822	1,189,267
Weather Bureau	4,497,720	4,164,038	3,731,235	2,909,884
Bureau of Animal Industry	16,085,195	15,324,947	14,398,524	11,778,135
Bureau of Dairy Industry	796,990	717,448	655,130	545,000
Bureau of Plant Industry	5,839,238	4,930,874	4,496,155	3,723,195
Forest Service	15,184,620	10,780,924	9,952,610	7,645,559
Bureau of Chemistry and Soils	2,104,051	1,925,080	1,766,458	1,470,305
Bureau of Entomology	2,863,740	2,471,700	2,213,968	1,729,241
Bureau of Biological Survey	2,229,170	1,756,177	1,356,280	1,017,261
Bureau of Agricultural Engineering	656,990	618,690	508,206	423,971
Bureau of Agricultural Economics ...	7,241,136	6,649,841	6,095,260	4,497,150
Bureau of Home Economics	246,700	233,365	212,749	169,338