

with the dirt being more or less damp.

3-24-37

Beautiful day in every respect.

3-26-37

Picked up a nice Scarabidae(10) on sidewalk on way to upper campus. No activity and acted as if it had been stung. Find the Dipter emerging from the manure pile. The superficial layer appears to be suitable for hatching purposes.

3-27-37

First day of active field work on Ichthyology Research problem of the Distribution of Utah County Fish. The purpose today was to collect representative material to use as a comparison for any subsequent collecting. Wilmer Tanner, Burton Hunt, Sid Boyle and myself constituted a party of feebly experienced ichthyologists seeking evidence to prove it all. We proposed to spend the forenoon at the mouth of Provo River but on arrival found that it would not be feasible to seine because of uncontrollable high waters. While we felt a keen disappointment it was as nothing compared to our thrill in seeing again the rapidly rising waters of a lake that has experienced near extinction only the summer before. Doubly encouraging too, when reversing our position to adjust our vision upon the distant Wasatch Mts. to see the white covered peaks with their potential waters along with the assurance of a more adequate habitat for our drought-worried fish. The rising waters and abundant snows impressed me with the feeling of a returning friend from exile. The water at the mouth of the river was unusually clear for this abnormal flow of water. Failing to make arrangements for boats at Mr. Milt Jacques, we boarded faithful 'lizzy' and worked up stream in quest of gentler flowing waters. Had in mind a permanent creek situated at the terminal of the old Provo bench delta, rising from the many springs located here. This creek is also supplied with water from the canal which leads around the base of the delta. The fluctuations of the source from the canal causes undue disturbances within the creek proper. The water is at all times clear except as it is influenced by occasional muddy waters from the canal. The food is very abundant. The upper end of its course is thickly populated with water cress and other water plants with their accompanying life of invertebrate insects. In a shallow hole immediately below where the canal ushers in its supply of water we took the following species all associated with one another within a 20 foot length of the stream bed. One(28) sun fish; one mud sucker, *Pantosteus platyrhynchus*; one lake sucker, *Catostomus fecundus*; 5 Brown trout, *Salmo fairio*; and one carp, *Cyprinus carpio*; also two silverside minnows, *Richardsonius hydrophlox*. The species were concealed under the protection of overhanging tree roots and fallen trees, being forced into the net only after vigorously and thoroughly probing with a long stick. A trail leads to the hole and probably accounts for the wariness of the fish. A *Belostomatidae*(12) was collected in our net at this point being dislodged from its abode under an accumulation of limbs and debris entanglement in the center of the creek. Placed it in the same formalin solution as used for killing fish specimens. While the solution was certain death to all the fish it only appeared to reenergize the water bug. Attacked the stream at several other points but without success, so abandoned the part of the river bottoms and headed upstream again to the Provo Brick and Tile Co. Mr. Sidney Belmont informed us that clear lake was our best bet for collecting the different species. He made a very interesting statement to the effect that trout have certain colors and conditions of flesh according to the type of food eaten. When eating their normal food of bugs and aquatic life the flesh is yellow, when feeding on prepared flesh of other fish, such as carp ground up, the flesh