
THE MURMAN BIOLOGICAL STATION.

SERGIUS MORGULIS.

To the observer abroad, in Europe and more especially in America, Russia is still vested with clouds of mystery. This is true even with regard to the scientific Russia, slightly known in other countries, which of course is due primarily to the Russian language being familiar only to very few scientists.

This note is intended to acquaint the reader with a neglected scientific institution, of no small rank, and is compiled largely from reports kindly placed in my possession by Dr. K. M. Derjugin, Curator of the Station.

Marine Biological Stations are the workshops of biologists, and ever since students of nature have abandoned their air-tight laboratories, stored up with pickled specimens, and migrated to the shores of the open sea, where they came in direct touch with an exuberant living world, our science has progressed by strides. This "migratory humor" effected also the Russian biologists, and the famous embryologist Kovalevsky succeeded in founding a Biological Laboratory on the coast of the Black

Sea, which soon became an important center for research work in Russia, and gained a world-wide reputation.

We cannot, however, say the same thing about the Murman Biological Station, established only in 1899, as yet very little known, and which, by the way, is often confounded with its unsuccessful predecessor, "The Biological Station of the Solovetsky Monastery."

The history of this Murman Station presents a few interesting features, so characteristic of every Russian "history." In 1882 Prof. Wagner, of the St. Petersburg University, was allowed to carry on investigations on the northern fauna in a fisherman's hut, belonging to the Solovetsky Monastery. This permission he obtained through the courtesy of the Father-superior of the Monastery, which is situated on the Solovetsky Islands, in the middle of the White Sea, a relatively short distance from the Arctic Ocean. Year after year, during the summer months, this fisherman's hut was visited by investigators who studied the rich animal and plant world of this region. In the meantime, the fisherman's hut has undergone considerable change. A few new buildings were added to it at the expense of the Society of Naturalists, and it was made more suitable for scientific work.

After a seventeen years' fruitful existence the laboratory had to be abolished on these islands. The death-blow to the young and growing institution was dealt by the new father-superior of the monastery who denounced the scientific visitors of these islands in his secret report to the office of the Holy Synod, by lodging a complaint that the presence of "impious" scientists acts demoralizingly upon the monks and pilgrims. The father-superior's argument produced its effect, and the nature-students soon packed up their luggage and started out in search for a new settlement in that cold region. Such has been found on the Murman Peninsula where the present Murman Biological Station was established in 1899, and has operated successfully since. They have fairly well equipped laboratories there, aquarium rooms, museum, a reference library containing a few hundred volumes, etc. The station is situated in an attractive rocky locality right on the shore of the Kolsky Bay.

The climate of this region is rather cold, the average yearly temperature not being above 0 degrees Centigrade, but July and Augusts are very comfortably warm months. The flora and fauna is very rich there, and as Prof. Derjugin tells me, there is hardly a case when the dredge does not bring up a multitude of various organisms. There have been listed over 500 representatives of all the classes of invertebrates and fishes, and Hydrozoa, Actinozoa, sea-urchins, star fishes, worms, planarians, nemertines, molluscs, crustaceans, are all very abundant, and their eggs can

also be obtained easily. Besides, there is an abundance of fresh- and brackish-water animals and plants as well as numerous land forms. Up to 1905 there had been at the laboratory about fifty investigators, instructors and students of various universities, and some thirty-five publications have been based upon materials collected and studied there. No special fee is imposed for the occupation of tables, and glass-ware, instruments and reagents, except the very expensive ones, are also allowed free of charge.

The student who goes abroad to spend the summer in research work, ordinarily goes to places where the sea is blue and the sky is hot, and it never occurs to anyone to visit the far north, and especially Russia. We shall, however, give a few hints of information as to how this remote station may be reached for the benefit of those who may experience the desire to study the northern fauna. The best way would be to go from Petersburg to Archangelsk by railroad, and then by steamer to Alexandrovsk where the station is located. The trip from Petersburg, affording a splendid opportunity to observe the northern part of Russia, is very inexpensive, and taking into consideration that there is no laboratory fee, and that living expenses are also very small, it does not involve any difficulty from a financial standpoint. A little knowledge of German, or perhaps still better, of French, will enable one to evade the difficulty which the Russian language presents. We feel sure that anyone visiting this place will carry off with him a pleasant recollection of the hospitality extended to him with the characteristic Russian cordiality.

Meeting of the Biological Club.

The Club met in Orton Hall March 2d, 1908. Dr. Hubbard presided. After the reading and approval of the minutes of the previous meeting, F. Carty, Fred Marsh and Stanley Hart were proposed for membership.

The paper of the evening was presented by Miss Freda Detmers. This paper was entitled, "A Month's Visit to South-eastern Alaska." It was illustrated by lantern slides, and many fine views of the glaciers, vegetation, towns and inhabitants were given. The vegetation in this far northern region presents some interesting phases of plant life, one of the most abundant species being the fire weed. The meeting was the best attended of the year, over fifty being present. Miss Emily Hollister was elected to membership, after which the society adjourned.

ARTHUR H. McCRAY, Secretary.