

## **The Students Association of Natural Science. Upsala.**

### **Geological Division.**

**Meeting January 22nd 1920.**

20 persons present.

The following officers were appointed:

S. ROSÉN, Secretary.

A. REUTERSKIÖLD, Treasurer.

H. OLIVECRONA and J. EKLUND, Reviewers.

Docent G. FRÖDIN read a paper of the geological position of the »Dala»-sandstone and the sparagmites of central-Sweden (cf. Sveriges Geol. Unders. Årsbok 1920).

**Meeting February 12th 1920.**

19 persons present.

Prof. C. WIMAN reviewed a paper by BRUENICH-NIELSEN, »En hydrocoral fauna fra Faxe och bemærkninger om Daniemet's geologiske stilling».

Prof. C. WIMAN reviewed, v. LINSTOW, »Der Krater von Sall auf Oesel».

**Meeting February 26th 1920.**

18 persons present.

Mr. J. EKLUND spoke on ore-veins in the west-swedish jatulian foldingzones.

Mr. C. SAMUELSSON communicated some observations on the quaternary hydrography in the neighbourhood north of Bråviken.

**Meeting March 11th 1920.**

20 persons present.

Mr. N. H. MAGNUSSON read a paper on granites and greenstones on the map-sheet Mjölby.

Prof. C. WIMAN reviewed a paper by prof. O. ABEL on »Das Entwicklungszentrum der Hominiden».

**Meeting March 29th 1920.**

28 persons present.

Docent S. EKMAN delivered a lecture on relics from the interglacial fauna of Scandinavia.

Mr. J. EKLUND spoke on copperglance in the »Visingsö»-sandstone giving a hypothesis of its way of formation and as a result drawing conclusions as to the climatical conditions during the time, when the rocks of the Visingsö-series were formed.

**Meeting April 13th 1920.**

30 persons present.

Prof. F. BECKE, Vienna, delivered a lecture on the zonestructure of the felspars.

Prof. A. G. HÖGBOM spoke on the Sub-cambrian landsurface and the Postsilurian denudation.

**Meeting May 7th 1920.**

12 persons present.

Dr J. PALMGREN spoke on the problem of the chemical constitution of the alumosilicates.

Mr. B. A. ASKLUND read a paper on the quaternary development of East Persia.

**Meeting May 20th 1920.**

15 persons present.

Mr. J. ARNBORG spoke on the earliest traces of the man in the north of Europe.

**Meeting September 23rd 1920.**

10 persons present.

The following officers were appointed:

S. ROSÉN, Secretary.

A. REUTERSKIÖLD, Treasurer.

N. HÖRNER and J. EKLUND, Reviewers.

**Meeting October 7th 1920.**

21 persons present.

Mr. C. MALMSTRÖM delivered a lecture on the new analytical method for the determination of the succession in time of the layers in the peat-mosses and its biological basis.

**Meeting October 21th 1920.**

19 persons present.

Prof. C. WIMAN spoke on v. RICHTHOFEN's aeolian formations in China.

Mr. S. ROSEN spoke on some stratigraphical-palaeontological observations in the Cambrian-Silurian strata of Östergötland.

**Meeting November 10th 1920.**

20 persons present.

Docent G. FRÖDIN read a paper on the Ottfjäll-diabase and the Åreschists.

Prof. A. G. HÖGBOM reviewed a paper »Researches in the brecciarocks of the Dalformation» by Mr H. ENGBERG.

**Meeting November 25th 1920.**

22 persons present.

Mr. E. LJUNGNER read a paper on the geomorphology of the islands outside Bohuslän.

Docent O. SJÖGREN demonstrated the recently published Norwegian topographical sheets »Skjommen» and »Elvegård» and drew attention to some interesting morphological features indicated in them.

**Meeting December 9th 1920.**

19 persons present.

Prof. A. G. HÖGBOM spoke on some contradictions in De Geer's ose-theory.

Prof. C. WIMAN gave a lecture on reptiles in the Cretacean of Kansas and demonstrated the fossils in the palaeontological museum.

**Meeting January 27th 1921.**

14 persons present.

The following officers were appointed:

S. ROSÉN, Secretary.

A. REUTERSKIÖLD, Treasurer.

N. G. HÖRNER and J. EKLUND, Reviewers.

Mr. H. JANSSON spoke on the occurrence of helium in nature and its technical use.

**Meeting February 2nd 1921.**

20 persons present.

Prof. O. HOLTEDAHL, Christiania, gave a lecture illustrated by lantern-slides on the geology of the north-western part of Spitzbergen.

Prof. O. HOLTEDAHL gave his opinion on the geology of the part of Norway bordering on Dalecarlia and Härjedalen.

**Meeting February 17th 1921.**

25 persons present.

The secretary welcomed Geheimerat prof. O. JAEKEL, Greifswald, to the meeting of the Section.

The Section resolved to subscribe to a monument over the late prof. HAMPUS V. POST.

Prof. P. QUENSEL, Stockholm, read a paper on the tectonics in the neighbourhood of Vilhelmina.

**Meeting March 12th 1921. To celebrate the 50th anniversary of the foundation of the Section.**

40 persons present.

The secretary bade the guests welcome and referred to the significant date.

Prof. A. WIMAN spoke on scientific expeditions made by members of the Section.

Mr. J. EKLUND spoke on the geology of the ores of the Torsäker-field, Gästrikland.

**Meeting April 8th 1921.**

16 persons present.

Mr. S. ROSÉN demonstrated a microscoperefractometer constructed by himself on the principle of the spherical refraction in liquids and demonstrated its use for the determination of the refraction of minerals.

Prof. C. WIMAN gave an account of the position and future prospects of the palaeontology in U. S. A. and Canada.

**Meeting April 21st 1921.**

16 persons present.

Prof. C. WIMAN delivered a lecture on Ichtyosaurians and demonstrated the specimens in the palaeontological museum.

Mr. J. EKLUND spoke on the ore resources of Finland.

**Meeting May 5th 1921 (an excursion to Hagelstena).**

15 participants.

Prof. A. G. HÖGBOM gave an account of Johan Gottschalk Wallerius, his life and work, Hagelstena being the old home of Wallerius.

Prof. R. SERNANDER read a paper over the development of Rappdal Moss. This moor lies in an ose-cavity 21 meter above the sea-level. The surrounding ose-cavities are dry, e. g. »Kungsgropen» in the next neighbourhood, but because of a layer of icesea-clay, a moor has been developed here. Except the character of the mud (swedish, »gyttja») this little bog shows the typical development of the lowland moors in middle Sweden. Thus at the bottom of a typical section in this moor there is a mud underlying a layer of reed and sedge peat (= sjökärtrorv) and above this a wood peat (fen peat; skogskärtrorv, Bruchwaldtorf), in the upper part with pine stools, which sharply separate the fen peat from the overlying bog moss (Sphagnum) peat. The contact between the wood peat and the bog-moss peat is the well-known subatlantico-subboreal one, the layers below being of subboreal age.

The basement mud in Rappdal Moss is distinctly lamellated each lamelle being about 2 mm. thick and every one consisting of two layers, a lighter and a darker one. No doubt these lamelles are annual layers. Probably the original seasonal stratification of the ooze (= ävja) has been conserved, the slime-eating organismus having by unknown exterior circumstances been unable to coprify the ooze (= ävja) into typical unlamellated mud.

The isolation of the original Rappdal lake from the sea is a rather complicated problem. The passpoint of the basement clay is a very low one, and it is quite possible that the water surface originally reached the passpoint of the ose-cavity, but successively was brought down by subterranean drainage, when the ose hills emerged out of the Litorinasea.

In the present vegetation we find distinctly developed zones, i. e. »lagg» *Carex-fen*, sedge *Carex-Sphagnum* moor, *Eriophorum vaginatum-Sphagnum*-moor, *Oxycoccus-Sphagnum*-moor, *Vaccinium uliginosum-Sphagnum*-moor to »pine moor». The zonation, however, is excentric, the zones being broadest in S. S. E., narrowest in N. N. W. It is the different exposition to the sun, that has caused this irregularity in the development from the original *Sphagnum-cuspidatum*-moor, which on account of the climate of the »Fimbul winter» drowned the last subboreal pine forest.

From about 1903 the growth of the old pines is much better than before, and at the same time a set of young pines began to grow up.

The lecturer showed that during the subboreal time, because of the warm and dry climate, the groundwater level in the marginal icesea-clay had gone down to about one meter. This was shown by the fact, that the clay down to this level was obviously weathered.

During the exceptionally warm summer 1901 cracks had probably occurred in the clay and self-drainage had taken place. Thus the growth of the trees was favoured and the long annual shoots of 1903 could be formed. The correlation between the temperature in the late summer and in the autumn of one year and the annual shoots of the following year was demonstrated by the shoots from 1912, 1915 and 1919.

#### Meeting September 15th 1921.

18 persons present.

The following officers were appointed:

S. ROSÉN, Secretary.

E. WIMAN, Treasurer.

J. EKLUND and E. LJUNGNER, Reviewers.

Prof. C. WIMAN gave an account of a scientific journey last summer to the museums and institutions on the continent.

#### Meeting September 29th 1921.

27 persons present.

Docent E. STENSJÖ delivered a lecture of the vertebratefauna in the Trias of Spitsbergen.

Prof. A. G. HÖGBOM gave an account of dead fishes in Dragan, a small inlet shut off from the sea, on Björkö, Roslagen (Cf. Bull. Geol. Inst. Upsala. Vol. XVIII, S. 239 a. f.).

**Meeting October 14th 1921, in conjunction with the Geographical Society of Upsala.**

50 persons present.

Prof. A. PENCK, Berlin, delivered a lecture on the glacial morphology of the Alps.

**Meeting October 27th 1921.**

21 persons present.

Mr. S. ROSÉN spoke on the tectonics in western Östergötland and on the age of the »Visingsö»-formation.

**Meeting November 10th 1921.**

16 persons present.

Mr. J. ERLUND spoke on the stratigraphy of the Skellefteå-field and on some Archean-problems.

**Meeting November 24th 1921.**

21 persons present.

Mr. N. G. HÖRNER spoke on subsoilwater researches in some countries of middle Europe.

**Meeting December 13rd 1921.**

30 persons present.

This being the last time prof. A. G. HÖGBOM was present at the meeting of the Section as professor of geology at the University of Upsala, the secretary made a speech of thanks referring to his important work for the Section during the passed years and expressed the hope that he for many years to come would remain the most active member of the Section.

The secretary, on behalf of the Section, welcomed the guests, docent TH. VOGT, Christiania, and prof. P. J. HOLMQUIST, Stockholm.

Docent TH. VOGT spoke on the tectonics and the stratigraphy of the mountain chain in northern Scandinavia.

