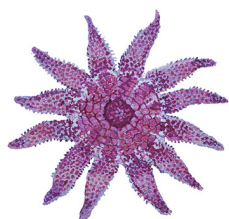


STARFISH from  
an oil painting by  
Anna Wilhelmson-  
Lagerman.



## On the field station's veranda

*Anna Tunlid*

“The importance of personal socialising between scientists should be underestimated by no one.” This was the conclusion to zoologist Hjalmar Théel’s description of Kristineberg Zoological Station in 1895. Three years previously, Théel had been appointed director of the station by the Academy of Sciences, and it was soon apparent that his ambition was to build it up, developing it into a versatile meeting place. Even if, according to Théel, the station’s primary task was to satisfy “purely scientific requirements”, this did not exclude it from also providing other activities to benefit Sweden, where possible. Among other things, there was a desire to offer students, future researchers and teachers the opportunity “to gain a more living insight into nature and to acquire warmer and deeper interest in its progeny”. The station could also serve as a meeting place in another regard, namely how researchers representing different disciplines could meet there, “the more frequently the better, to exchange ideas, profit from varied perspectives and gain from each other’s experiences and working methods, all things that make significant contributions to reducing uniformity of opinion”.

The station also succeeded in attracting visitors of different types, from professors and students to grammar school teachers who visited to study sea organisms for varying periods of time. Théel kept careful notes about who visited the station and why. Some returned regularly for many years, while others only visited the station once. A photo album from the station that has been preserved in the archive shows how the visits not only facilitated scientific studies, but also provided opportunities for socialising. A number of photos were taken on the station’s veranda, often around a laden coffee table, where visitors appear to have regularly gathered to spend time together. The pictures are surprisingly similar over the nearly thirty years that the photo album spans, even if the number of student caps declines with time, probably



**FOR MANY YEARS**, every summer visitors to Kristineberg Zoological Station gathered on the veranda for a group photograph. The pictures were taken by person(s) unknown between 1906 and 1935 (note how the tree in the background grows).



due to changes in the use of academic attributes and the shifting number of students appearing in the pictures. This tradition of documenting at least some of the summer's visitors makes the photo album part of a scientific memory culture. In this way, the sense of community that was established at the research station was manifested and preserved for posterity. However, the staff who were necessary to build up and maintain the station are not visible in these photos. Théel came to understand the amount of work this entailed when, in the early 20<sup>th</sup> century, he tried to realise his plans to modernise and develop the research station.

The station was founded in 1877 on the initiative of zoologist Sven Lovén, who had visited Kristineberg for many years. Bengt Fries had started visiting this place as long ago as 1835; he was the curator of the Swedish Museum of Natural History's zoology department, and had discovered that the sea at Kristineberg offered excellent potential for supplementing and expanding the museum's collections. Lovén was also fascinated by its rich fauna and its location. When the idea of a Swedish marine research station began to develop – certainly inspired by the field stations that were then being established in several other countries – Kristineberg was the natural choice for Lovén. In addition to the plentiful access to working material, proximity to the seaside resort of Fiskebäckskil was a great advantage due to its post office and telephone exchange, as well as the daily steam boats to Gothenburg and Uddevalla. Despite biology field stations generally being established in places where there was access to “pristine nature”, there was a need for links to the city and urban life. The first buildings could be acquired thanks to a private donation to the Academy of Sciences and, a few years later, a separate laboratory building was constructed, a water tower with a wind-powered pump, as well as a watering system to provide the aquariums with running seawater. The idea behind Kristineberg, as with other similar field stations, was not just to facilitate the study of flora and fauna in nature, but also to allow them to be studied in laboratories. In this way, field stations became places in which the observation of organisms in their natural environment could be combined with experiments in the laboratory.

Activities at Kristineberg were primarily conducted in the summer during Lovén's time as director, but when Théel took over the position he was determined to expand and equip the facilities to make a field station that could function throughout the year. The composition of winter fauna was completely different to the summer fauna, as he stated in a missive to the Academy of Sciences in 1900, and many biological conditions must be studied throughout the year. The establishment of a chemical and physiological laboratory was desirable for studying the physiology of the lower animals, an area of research that, according to Théel, was almost entirely neglected in Sweden. If this expansion was realised, the station would also be able to

welcome foreign researchers which, in turn, could provide the station's younger researchers with an opportunity to benefit from their working methods and specialisms, without the need for expensive travel; "indeed, an advantage that can never be valued highly enough", stated Théel. Behind these plans, it is possible to see the outline of inspiration from the famous zoological research station in Naples which, according to Théel, was "a permanent international congress of the natural sciences", at which researchers from around the globe could meet and exchange experiences.

To realise these ambitions, a new, two-storey, winter laboratory was built in granite at Kristineberg (again using a private donation), as well as a completely new water tower and a watering system with considerably greater capacity than previously. Gradual improvements and additions were also made to the harbour and accommodation. A new well was blasted for fresh-water and an acetylene gas generator was installed. These construction projects were far from insignificant, bearing in mind the station's location and its exposure to the elements. In practice, it was the caretaker who was master builder for the entire expansion – although he remained in close correspondence with Théel, who spent the winter months in Stockholm upholding his position as curator at the Museum of Natural History. The caretaker, however, lived at the station throughout the year, as did the housekeeper who looked after the interior of the houses and who, in the summer, was responsible for feeding and attending to the station's guests. For many years, these two people were responsible for the practical maintenance of the station throughout the year. In addition, a dredge master and dredgers were hired from among the local fishermen, for the collection of marine organisms.

However, because of these extensions and the gradually expanding activities, more staff were needed. In a missive to the Academy of Sciences in 1905, Théel stated that the station was now one of the biggest in Europe and probably one of the best equipped. But the situation was not as good as regards scientifically trained staff: "To my knowledge, there is no other station of any significance, which is in such a disadvantageous position". An assistant should be employed to resolve this, one who would live at the station throughout the year. This person should be a "trained marine zoologist, familiar with modern developments in biology and preferably have conducted independent scientific activities". Théel's request was heeded by the Academy of Sciences and, the following year, Hjalmar Östergren, Ph. Lic. from the zoology department in Uppsala, was employed as director and Théel became head.

Östergren's tasks included ensuring that visiting researchers at the station could access the necessary working materials. In the summer months, he was also to offer courses to younger students and teachers. These courses included boats trips to various sites, and demonstrations of the daily catches of organisms that the dredgers delivered to the station. The materials collected were

not only used for the station's research; specimens were also supplied to the Swedish Museum of Natural History and other institutions around Sweden. In addition, the teachers made "school collections" for a range of schools and grammar schools. This made the field station a hub for the circulation of knowledge and objects between different institutions, both inside and outside the Academy.

Théel's vision of expanding the station thus later came to fruition. In a lecture in 1919, he stated that it had the best possible location on Sweden's west coast. There was access to unlimited materials for "the in-depth study of organisms' nature and exploring connections in the natural world". According to Théel, the station had hosted more than a thousand visitors since it was founded in 1877. Many of these were foreign researchers, even if, naturally, the majority were Swedish. "On the whole, with a few exceptions, all now living Swedish biologists should have studied at Kristineberg for at least a month or two", Théel said. This statement was probably somewhat exaggerated, but still indicates an important factor; despite its name – Kristineberg Zoological Station – it was visited by biologists from numerous different disciplines, which was not unusual at similar marine research stations. The focus of research also developed over time, with descriptive studies being supplemented by investigations characterised by more physiological and developmental biology.

Some years later, when the research station celebrated its 50<sup>th</sup> anniversary, the researchers and patrons who, over the years, had contributed to the station's successful development were honoured – as is often the case at jubilees. The station's importance for both Swedish and international research was highlighted by the press, but the report also described how scientific studies were combined with communal dining, trips on the station's boat, invigorating dips in Gullmarsfjord and visits to nearby seaside resorts. If the station's photo album primarily has an internal memory function, these articles contributed to establishing a more official image of the research station as an environment in which modern biological research, scientific exchange and socialising were successfully united. It also created the image of the research station as a place for creation and relaxation, a haven beyond the everyday work of science.

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Hjalmar Théel's description of the research station is in *Om Sveriges zoologiska hafsstation Kristineberg* (Stockholm, 1895). See also Théel, "Om utvecklingen af Sveriges zoologiska hafsstation Kristineberg och om djurlifvet i angränsande haf och fjordar", *Arkiv för zoologi*, vol. 4:5, 1908. Théel's letter to the Academy of Sciences dated 29 April 1900, the manuscript of his lecture in 1919, the photo album and newspaper clippings about the 50<sup>th</sup> anniversary in 1927 are in the Kristineberg archive, the

Royal Academy of Sciences. Théel's missive from 6 October 1905 is in the appended minutes for 1905. The activities of the research station are also described in the Academy of Sciences' annual reports. The station's activities during Sven Lovén's time as director have been examined by Helena Ekerholm in "Keeping a house for science: Sofia Kristensson as matriarch and gatekeeper at Kristineberg zoological station as a scientific household, 1877–1889", *Science in Context*, vol. 28, 2015. The evolution of biological field research in the early 20<sup>th</sup> century is covered by Robert E. Kohler, *Landscapes and Labscapes: Exploring the Lab-field Borders in Biology* (Chicago/London, 2002). The field station's progress and development can be read about in Raf de Bont, *Stations in the Field: A History of Place-based Animal Research, 1870–1930* (Chicago/London, 2015). See also Helena Ekerholm, Karl Grandin, Christer Nordlund & Patience A. Schell (eds.), *Understanding Field Science Institutions* (Sagamore Beach, 2018).