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The map collection of the Czech Republic's National Agricultural Museum

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Summary: Prague's collection of rare materials comprises around 6,000 pieces, including maps and plans created during the 19th and 20th centuries. The core of the collection consists of maps and plans documenting Czech garden architecture from the second half of the 19th century and the first half of the 20th century. The National Museum of Agriculture of the Czech Republic acquired these materials through its own acquisition activities and numerous donations in the second half of the 20th century. For a long time, these materials were not professionally processed; they were merely registered as acquisitions and placed in completely unsuitable storage spaces. After 1989, demand for these materials for research purposes gradually increased. The plan documentation, mostly on tracing paper, was badly damaged. In 1994, the National Museum of Agriculture began using its central Prague building again, and all this material was taken there and cataloguing began. A collection of maps and plans was created within the museum archives, and due to their poor condition, preventive conservation and subsequent digitisation were planned. This was carried out between 2007 and 2012, after which the museum launched a map portal in 2013.

The collection of maps, plans and atlases stored in the Chotek Library (Kačina) contains around 1,000 items. The time span is from the mid-16th century to the first half of the 20th century. The material is mainly printed. Some of the 18th century maps probably relate to the cavalry journeys of Rudolf Chotek and his nephew Jan Rudolf. Many of the maps were intended for teaching purposes; there are also plans of towns, postal and railway connections, and architectural plans. This collection is currently being catalogued.

The establishment of the maps and plans collection stored in Prague

The National Museum of Agriculture was established on 28 September 1918 with the foundation of the Czech Agricultural Museum Association. Following the establishment of the first Czechoslovak republic, the association was called the Czechoslovak Agricultural Museum. Thanks to the excellent museological work of many experts and the political support of the Agrarian Party, it became one of the most progressive museum institutions of the new-founded republic. From the outset, the museum struggled with a lack of space, although branches were eventually established in the provincial capitals of Bratislava, Brno and Opava. Therefore, in the 1930s, plans were made to build a new main building in Prague's Letná district. Designed by architect Milan Babuška, this building is now an important monument of Czech functionalism and was constructed between 1937 and 1939 as a joint project with the National Technical Museum. However, it was occupied by the German army shortly after completion.

After the war, the building was returned to its use as a museum. In 1950 the State Dislocation Commission temporarily released it for the use of the newly established design organisation Stavoprojekt (this state organisation had brought together nationalised private architecture offices). The museum was moved to part of the Konopiště Chateau and The Kačina Chateau near Kutná Hora. During this period, the Prague building was damaged by unauthorised temporary structures that violated applicable regulations, especially those relating to safety and fire.

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In the early 1960s, the museum moved its collections from the Konopiště Chateau to the Ohrada Hunting Lodge in Hluboká nad Vltavou, while also acquiring part of the the Lednice Chateau premises in South Moravia on a leasehold basis.

At the turn of the 1980s and 1990s, the museum acquired additional exhibition and storage spaces in Zdechovice and Valtice, as well as John's Castle (Janův hrad). In 2001, the Lednice Chateau premises were vacated, and in 2002–2003, the collections were transferred from Zdechovice to the Čáslav premises, which have been open to the public since 2004. The museum did not return to its original building in Prague until 1994, when it immediately began its gradual rehabilitation. The building has undergone extensive reconstruction in recent years, with modern exhibitions being created according to current trends.

Like the National Agricultural Museum itself, the museum archive has a long and rich — sometimes turbulent — history. Its origins can be traced back to 1918, when the Czech Agricultural Museum Association was founded. Significant momentum was gained in the process of creating a distinct archive in 1932 under the influence of the renowned forestry and museological expert Jan Frič (1883–1971), when the management of written and photographic documents became an integral part of an overarching institutional strategy. However, frequent relocations of archive materials and collections across museum branches, coupled with an absence of continuous cataloguing work, resulted in the fragmented nature of the preserved material. Since the 1950s, the archive used to be located at the Kačina branch. After returning to the central building of the museum (1994), all archival materials were brought together here. These materials are currently being processed and become part of the National Archival Legacy records.

Most of the 6,000 maps and plans held by the museum are garden plans, forestry maps, topographic maps, administrative political maps, and maps of one-off surveys and statistical reports processed by the Ministry of Agriculture. The museum acquired these maps through its own acquisition activities, primarily from personal estates, closed private studios, and defunct businesses. Due to turbulent historical events and the museum's frequent relocation, the maps were scattered across its many historical and current branches. Historically, most of the maps were located at Kačina and Lednice castles.

As with most map collections in memory institutions in the Czech Republic, this collection does not have a comprehensive inventory of its contents for a number of reasons.

From the outset, the maps, as well as all the archival materials that came to the museum, were used as study material or supplementary material for exhibitions or publishing activities. They were therefore not recorded as separate collection items and only brief entries of the 'maps – 8 pieces' type appear in the accessions journal without any further specification.

As these are large archival materials, museum staff often separated them from personal collections and files. In the past, the museum lacked the space and technical capabilities to store maps properly, except for a few unsuitable wooden map cabinets. The materials were mainly stored in rolls or folded into small formats (mostly tracing paper or oilcloth maps). The collection also included poor-quality copies of plans for cowsheds and other agricultural buildings from socialist agricultural production which lacked design stamps, as well as copies of maps from other archives. These copies were used in numerous exhibitions. Handling such materials made cataloguing work impossible, and researchers did not use the maps for the same reasons.

In 1989, fundamental political changes took place in Czechoslovakia, leading to the collapse of the communist regime and the establishment of a democratic government. These changes also sparked renewed interest in long-neglected research topics, particularly garden architecture. In addition to horticultural students, building authorities and gardening companies have become interested in

garden plans for the renovation of private and public gardens and parks, as there has been a tendency to return to traditional designs. At that time, garden maps and plans were stored at several branches of the Agricultural Museum, but since they had not been processed, making them accessible posed considerable difficulty. The repeated unpacking of roll materials and unfolding of plans had a devastating effect on these maps, and the method of their storage was alarming too, as there were no adequate storage space in the castle and it was impossible to maintain stable climate and temperature conditions.

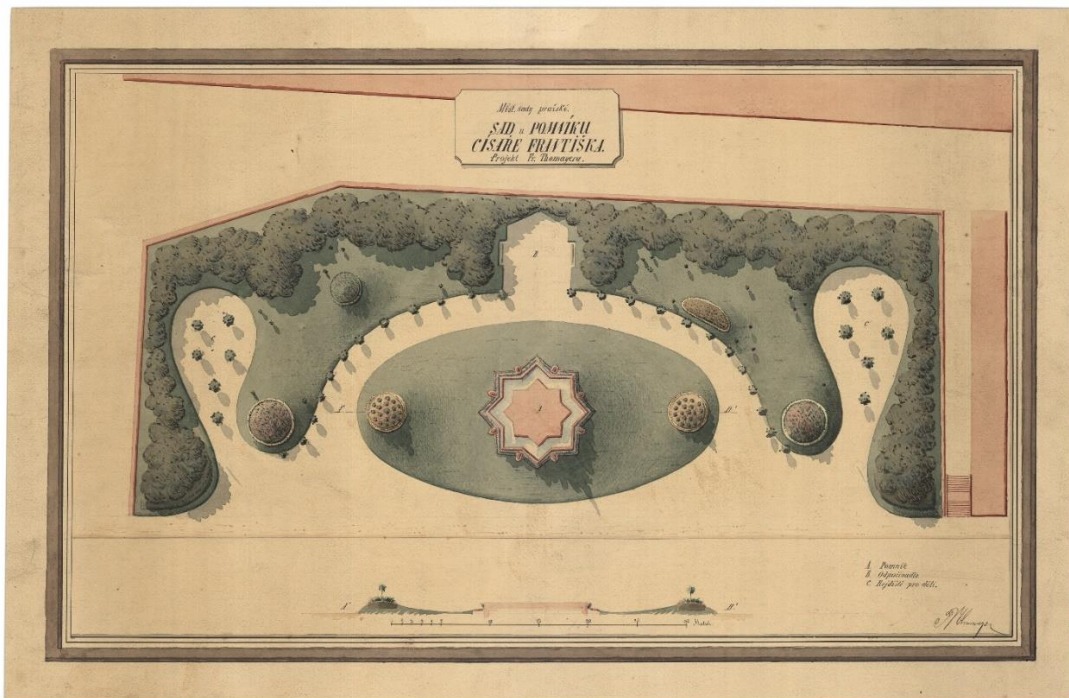


Figure 1. Orchards in Prague City Gardens, located by the monument to Emperor Francis II. (Kranner's Fountain) (1768–1835), were designed by architect František Thomayer in the second half of the 19th century.

In 1994, the Agricultural Museum regained its Prague building. The museum management decided to concentrate this material in the building and begin its systematic processing. Thus, the Collection of Maps and Plans of the Agricultural Museum was created as a separate collection with its own curator, who began processing the material and making it accessible.

Processing of the maps and plans collection stored in Prague

This diverse set of materials was initially divided into several thematic groups for processing. The museum staff first focused on the garden plans, the oldest and most comprehensively preserved part of the collection. At that time, these plans were the material most sought after by researchers.

The individual maps were sorted by author, mounted on special glass and stored in large boards made of suitcase cardboard to prevent them from being rolled up again. Before being processed and included in the registry, any necessary restoration work was carried out on cracked and torn maps and plans so that they could be scanned, and the individual sheets were cleaned further. Each map and plan was given a new stamp containing a registration number, along with information on continuous numbering and the type of map or plan (Fencl, 2014).

The digitisation process began in 2007 following this processing. Several types of scanner were used to perform the scan at DPI resolution. The scanned data was then further edited and saved in

TIFF format. The curators also prepared viewing-format PDF scans, as well as analogue previews of the processed originals in A3 format, which were laminated. These were presented to researchers for study, meaning that the originals did not have to be handled.

Until 2011, digitisation was carried out externally at the Institute for Forest Management in Brandýs nad Labem using data obtained by the previous curator of the map collection, Ing. Petr Fencl, between 1997 and 2006. He became the curator of the NZM Map Collection in May 2007 and devoted himself to its systematic processing. In 2010, the BACH-ProArchiv system was purchased to record catalogue metadata. From 2011 to 2012, a subsidy was obtained from the Ministry of Agriculture to prepare the maps for a web application. In 2013, the National Museum of Agriculture (NZM) launched the 'Old Forest Maps' portal, where the results of the digitisation process are gradually being published. This website acts as an aggregate, and it is also possible to find the results of the agricultural map digitisation process from many archives in the Czech Republic here. The outcome of Petr Fencl's work was a certified methodology, which was published in 2015. However, it did not take into account technical parameters related to storage, such as humidity, temperature and acidity levels. This is understandable given when the methodology was created: at that time, the museum lacked adequate depositories, financial resources and personnel. In short, this is a methodology for the remedial restoration of old maps for which restoration or dignified storage is not financially accessible.

Uniform flapped boards in a 75 x 112 cm format were created for the planning documentation. Made of 1.5 x 2 mm cardboard, the board elements are connected with bookbinding cloth and secured with binding tape except for the spine. The boards with maps and plans were stored in wooden drawer cabinets (Fencl, 2015).

Due to the departure of its curator and the transfer of his job to another NZM branch, the NZM map collection was incorporated into the museum archive in 2017. The digitised maps and plans, including several types of scanner, were transported from Fencl's residence in Prague. The processing, cataloguing and digitisation of this collection is ongoing.

Digitisation is carried out continuously according to current research needs, with several types of scanner being used. Since 2021, this process has become more systematic following the purchase of the large-format WideTek 36ART scanner. Maps and plans are saved in two formats: TIFF, a lossless format with lossless compression and a larger data volume, and JPEG, a lossy format with a smaller data volume. Additionally, working and preview scans are created in JPEG format using lossy compression and a smaller data volume. The technical parameters and standards of digitisation are set out in the NZM Digitisation Guidelines. These guidelines are based primarily on the following documents: The Metamorphose Preservation Imaging Guidelines and the Technical Guidelines for Digitising Cultural Heritage. A total of 3,500 maps and plans have already been processed.

The original maps and plans are being prepared for transfer to the low-cost Čáslav depository, which was built in 2022. There, they will be stored in a dignified manner and in deacidified storage boards. The transition to the new Museion registration system is underway this year, with existing data gradually being migrated, including pairing with digital image documentation. The database is available to all NZM employees for searching, and its full publication is planned. In addition to the Starelesnimapy portal already mentioned, some visually appealing maps are being published gradually on the eSbírký (e-Collections portal).³

³ This Czech internet portal is intended for the online viewing of digitised collections from Czech museums and galleries. The platform serves experts, researchers and the general public. The eSbírký (eCollections) content

The collection of maps and plans is gradually growing. The history of garden architecture continues to be a popular research topic. A recent addition is a set of technical drawings by the architect Eduard Galuszka (1938–2005). He worked at Stavoprojekt's urban planning centre in Ostrava, where he specialised in sanitation and reclamation studies — the restoration of landscapes damaged by coal mining and industrial activity in the Ostrava and Karviná regions. In addition to the Collection of Maps and Plans, thematic maps have been stored which have become part of specific subcollections of the NZM. Most of these maps are in the Forestry subcollection. The collection of maps in Chotek library is also registered separately.

Map collection in the library of Kačina Manor House

A short description of the Kačina Empire-style manor house provides insight into the background and ownership status, including the map collection which forms part of its historical inventory. Construction of Kačina manor house began in 1802 and continued until 1823, but it was never completed. The Chotek family owned the estate until 1911, when the last male heir, Emerich, died and it passed to his nephew, Quido Thun-Hohenstein. Thun-Hohenstein had financial problems which led to his bankruptcy and the seizure of his property. During the Nazi occupation, the estate was sold at a mock auction to Siegfried Zoglmann, the Protectorate's Hitler Youth Commissioner. Following the Liberation in 1945, the castle was handed over to the state administration and, in 1948, it was acquired by the Agricultural Museum as a replacement for its original building in Prague's Letná district. The castle's inventory was transferred to the State Heritage Office, except for the library, which became the property of the Agricultural Museum and is still cared for by them today.

Jan Rudolf Chotek, the most influential representative of the Chotek family and the builder of Kačina, compiled the core of the library, which today comprises over seven thousand books, maps and pictorial prints. His descendants and successors added to the library on a smaller scale, according to their individual needs and interests, but none of them matched J. R. Chotek's breadth of knowledge and interests. J. R. Chotek was an encyclopaedic man whose interests ranged from botany and civil engineering to medicine and linguistics. This broad range is understandable given that Chotek held key administrative positions in Bohemia — he served as Supreme Purgrave of the Bohemian Kingdom and Imperial Minister of Finance, and was President of the Royal Bohemian Academy of Sciences for two decades (1804–1824). Given these important roles, it is clear that maps were essential for the responsible administration of any part of the country. Maps suited to the needs of a land administrator tend to be topographical (describing the earth's surface), chorographic (detailed) and economic (showing agricultural and industrial use).

In his most important work, the Inventory of Maps of the Czech Lands, which remains unsurpassed in Czech cartographic institute, František Roubík mentions the lack of a critical inventory of cartographic material as one of the basic causes of imperfect knowledge of cartographic designs in the territory of Czechoslovakia. The absence of such an inventory has deeper causes related to the nature of the material itself. The two main causes are the content and the format. Maps usually played the role of supplementary content to texts, books, contracts or official documents and therefore did not function independently or act as a unit of cataloguing record. The format of maps did not allow for convenient storage on standard library shelves and required deep cabinets or map tube racks. This further excluded map collections from standard cataloguing (Roubík, 1951). An

consists mainly of photographs, audio-video recordings and 3D models, and is made available without financial, geographical or temporal restrictions.

expert opinion based on a 1941 library revision reflects this discretion, as it classifies maps as part of the library collection, but pays no attention to them, does not search for rare prints and does not determine their value.

The "map room" inside the library contains surface maps, but a significant proportion of the large-format and non-standard items are building plans, architectural sketches, drawings and engravings. Conversely, geographic books containing maps are not given much consideration. Within the map collection itself, roll maps can be identified as a distinct category, their form constituting an additional degree of difference and resulting in a more flexible approach to cataloguing.

Deeper research is only just beginning and we are still catching up on past debts, so it should be clear that our current description is necessarily provisional. Our aim as librarians is to draw attention to the Castle Library and its map collection as a highly interesting cartographic phenomenon that straddles the disciplines of geography, cartography, and library science.

It is difficult to accurately date the set of maps under study, since maps were not dated to the same extent as books, in order to give the impression of constant currency to consumers. Even without this, information flows were very slow, so the only practical significance of not giving a publication date was commercial. For example, Kreybich's map of the Chrudim and Čáslav districts, which depicts Nové Dvory and the Kačina castle area, is dated 1833. This was 21 years after construction of the castle began and 10 years after the rough construction was completed, including the roofs. Yet the map does not provide any topographical information about the castle. However, an undated map from the first half of the 18th century shows the builder of Kačina has pencilled in a small part of the castle, indicating it must have been in use after 1802, when the final shape of the building was decided. Most maps do not give a date, which, as we can see, is irrelevant from the user's point of view. We can summarise the dating of the set of maps as follows: 65% are from the 19th century, 25% from the 18th century and 10% from the 20th century (up to the 1930s). Exceptions extending into the 17th century are permitted.

The map collection covers all parts of the world available on the contemporary market, with a particular focus on Europe. Particular attention is paid to Germany and Italy; we believe that the focus on Italy is due to the printing craft, which originated in Venice and remained most highly developed there until the 19th century. Germany, however, is divided into southern, central and northern parts, each of which is represented by a separate detailed map. Maps of Asia, Africa, America, Australia and Antarctica are also included (Katalog map a plánů).

The richness, variety and surprising level of detail of the local map collection attracted the attention of the Geographical Institute of the Czechoslovak Academy of Sciences in the last century. Between 1960 and 1980, its employees borrowed around one hundred cartographic items from the castle library for study purposes, but the only known outcome of this was the book Plan of Prague from 1791 (Pokorný, 1980), written by Dr Ota Pokorný. Clearly, the map collections of castle libraries offer considerable research potential for expert cartographers and geographers.

Conclusion

Like similar collections held by Czech memory institutions, the map collection of the NZM archive forms an important part of cultural heritage. It is a valuable source of documentation on the economic activities, historical development of the landscape, and spatial planning of a given area. Consisting of around 6,000 items, it includes garden and forestry plans, topographic and administrative maps, technical drawings, and reclamation project documentation. The collection's content fully reflects the character and research intentions of the institution. At the same time, it is

possible to trace how the relationship between museum workers and individual maps changed over time — from auxiliary study material to separate objects in their own right.

Although much of the material has already been processed, there is still much to be done to complete the efforts to preserve and make this collection accessible, create a comprehensive digital version, ensure long-term protection, and strengthen its use in professional research and public presentations of cultural heritage.

A map collection in a private library, whether in a manor house, a scholarly institution or a state library, is usually an unexplored cartographic field. It primarily reflects the personality of the originator (owner) and their personal or professional interests, which can be inferred from the library's contents. Secondly, it reflects the state of the market at the time and the limits of the individual's and their social environment's knowledge. Like the book collection, the map collection constitutes an information base for carrying out its duties: the members of the Chotek family, J.R. Chotek in particular, needed detailed maps for the effective administration of the area of the monarchy entrusted to them, as well as to gain knowledge of the 'other' world and other countries, especially their geographical features. This knowledge was supplemented by linguistic and cultural information obtained from books.

Examining the Chotek family's map collection, as preserved in its original storage location at Kačina manor house, we can conclude that the average date corresponds to the 'golden' age of the noble family. During this period, it was crucial to ensure vigorous development and effective performance of their duties, as well as proper representation of their social status. The collection's content reflects the roles and functions of its members. We view maps in the context of private libraries from an informational and practical point of view, taking into strong consideration the initial (historical) purpose of their acquisition, as these facts constitute half of the historical value of the map and form an integral part of it.

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The eSbířky (eCollections) portal: <https://www.esbirky.cz/>

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