# SALVAGING AND CONSERVATION OF FIRE-DAMAGED PRAYER BOOKS OF PIIRISSAARE OLD BELIEVERS CONGREGATION

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## **INTRODUCTION**

On 18 May and 1 June 2016, the National Heritage Board invited specialists from the National Archives of Estonia to evaluate fire damage to Piirissaare Old Believers prayer house's books, and carry out the rescue operations. Thanks to active and effective measures in rescue operations in cooperation between the National Heritage Board, people and congregation members of Piirissaare as well as conservation staff from the National Archives, the spread of major water damage in valuable volumes was avoided (Fig 1 and 2).



Fig 1. A member of Old Believers Kira Kuznetsova and conservator of the National Archives Koidu Laur are drying water-damaged prayer books in Piirissaare.



Fig 2. Wet books drying in sunlight.

The congregation opted to hand over 8 important prayer books to the National Archives that included specialists from Estonian National Museum, Tartu Art College, University of Tartu Library, National Library of Estonia and City Archives of Tallinn to carry out conservation work.

# **RESEARCH SUMMARY**

The first Old Believers came to Estonia in the end of the 17<sup>th</sup> century and in the beginning of the 18th century. On the Eastern border of Estonia a community of the Old Believers is still living, preserving their original traditions, religion and lifestyle<sup>1</sup>. The first archival records of the Piirissaare Old Believers and the prayer house are dating back from 1802<sup>2</sup>. There were seven monthly prayer books (Минея месячная) and one general prayer book (Минея общая) picked up by Piirissaare Old Believers congregation for conservation. There are no data on the exact age of the books. It can be assumed by the watermarks dated from 1851–1854 (Fig 3) that books were printed between the second half of the 19<sup>th</sup> century and the beginning of the 20th century. Most of the books have a text, stamp and date 1925 on the flyleaves confirming the ownership of congregation. According to the research conducted in the National Library of Estonia, these books are reprints of the Moscow publication from 1650 (Larissa Petina).

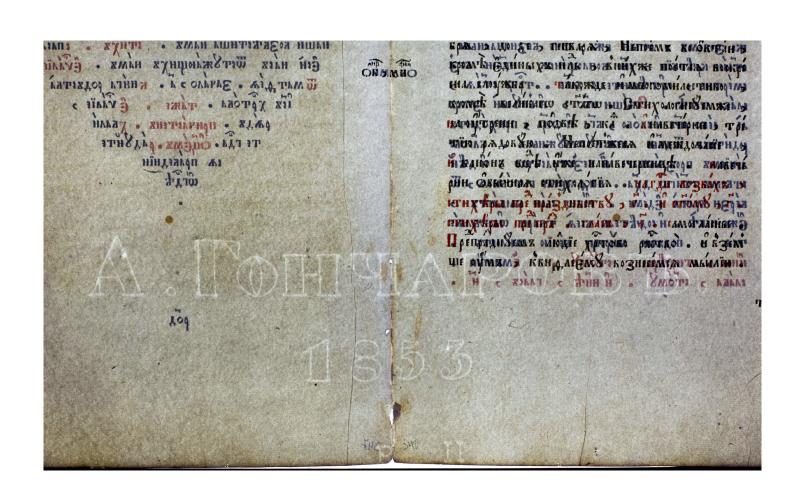


Fig 3. Watermark contains name A. Гончаровъ and date 1853 (prayer book / Минея общая).

The dendrochronological dating of the oak wooden boards<sup>3</sup> was carried out at the University of Tartu but deficiency of reference data from the respective Russian regions initially did not allow to achieve the results (Alar Läänelaid).

Blind tooling technique was used for decorations of the leather bindings. Observation of stamps did not contribute dating of books. The pH measurement, lignin and alum qualitative analyse of paper were carried out. For surface pH measurements Mettler-Toledo MP120 was used (British Standard 2924). The average pH value of text block was 5,1. Lignin content was determined by fluroglucinol method (TAPPI Standard T 401). All samples gave a positive reaction to the lignin. Alum content measurement was based on detecting the aluminium ions (Panduran Pen, Klug- Conservation). Tests showed the presence of aluminium ions. It means that wood pulp paper with alum sizing was used for printing of the prayer books.

### **CONSERVATION**

All the leather-bound books had sustained significant fire damage. Edges of covers and text blocks, headbands and spine had been destroyed. One leather binding was almost completely burned (Fig 4 and 5). Extinguishing efforts had also caused water damage and soil (Fig 6).



Fig 4 and 5. Fire-damaged prayer books.

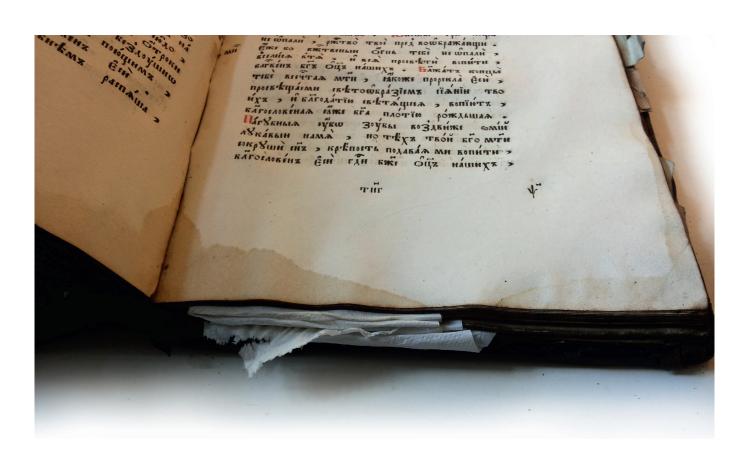


Fig 6. Water damaged text block.

Mechanical, biological damages, dirt and previous inappropriate repairings were also observed before the conservation. Selection of conservation methods for fire-damaged books was based not only on the scope and nature of damage but also the wishes and views of congregation members. The Old Believers, for example, wanted for traces of fire damage to be minimised after conservation.

Books were first carefully cleaned of the soot caused by fire and the prior grime. Damaged wooden boards were examined and restored (Fig 7). After cutting of burned edges of the text block the dimensions of covers were slightly decreased. Raised cords were lengthened to improve their attachment to wooden boards and the spine was supported with Japanese paper (Fig 8). Wheat starch paste was used as adhesive.



Fig 7. Cleaned, polished and restored wooden boards.



Fig 8. Lengthened raised cords

The burned leather of the book covers and spine were replaced with new calfskin. Aniline dyes were used to obtain suitable colour tones. Less damaged original leather fragments were preserved and combined with new leather into a coherent whole. Preserved metal book clasps and corner bosses were cleaned with 3% EDTA solution and replaced with new ones where necessary (Fig 9). Destroyed headbands and damaged flyleaves were replaced with new ones.



Fig 9. Prayer book after conservation.

Text blocks were repaired using Japanese and Korean paper and wheat starch paste was used as adhesive (Fig 10).

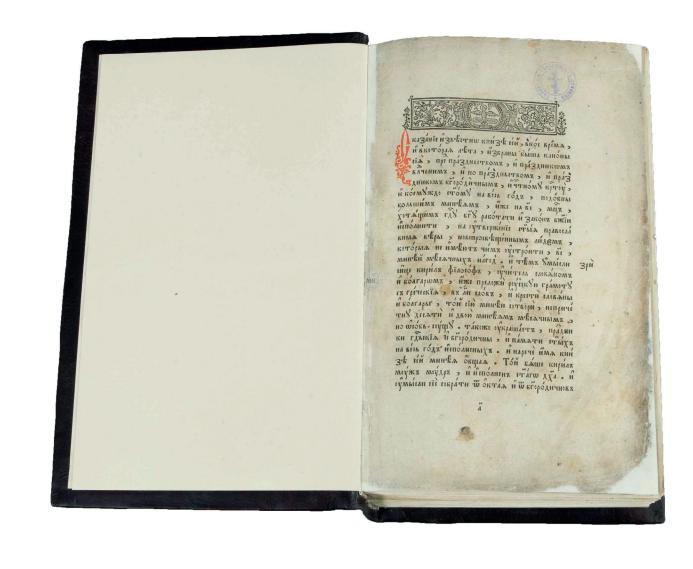


Fig 10. Text block of the prayer book after conservation.

In case of need water sensitive stamps were fixed by using cyclododecane. Eucalyptus oil was used for removing pressuresensitive tapes from paper.

Finally, a protective enclosure was made for the prayer books (Fig 11).

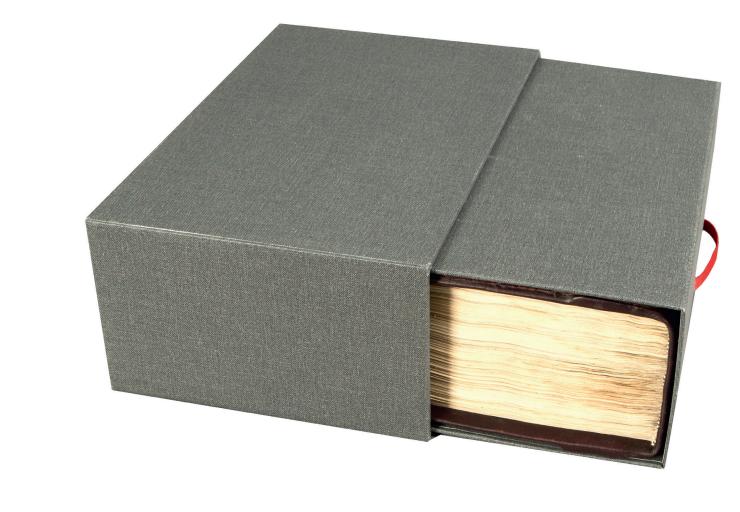


Fig 11. Protective enclosure for the prayer book.

The conservation work took 9 months and books are now ready to be handed back to the Old Believers Congregation.

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