

15TH INTERNATIONAL SYMPOSIUM KOPAČKI RIT 2026 • OSIJEK, OCTOBER 1–2

BILJE THROUGH THE EYES OF STEAM

Four years – four stories of preserving our homeland



Eugen Savojski Manor, Bilje

Mirna Prusina, Zdenka Ćutek • Bilje Primary School



2023/24 Adventure in the Manor



2024/25 Bilje Steppe



2025/26 Traditional House



2026/27 Kopački Rit at Heart



ABOUT THE PROJECT

Every year, one more story about our homeland

Every school year, students of Bilje Primary School use interdisciplinary research to study one theme from our homeland – the Municipality of Bilje.

Project goals:



Preserve our living environment and its natural and cultural diversity



Teach students an interdisciplinary research approach



Develop entrepreneurial thinking through the Student Cooperative



Strengthen cooperation with the local community

Bilje Student Cooperative — every June and July, the project's results are exhibited and sold at the Bilje International Ethno Fair.

Four years, four stories



2023/2024

Adventure in the Manor

completed



2024/2025

Bilje Steppe

completed



2025/2026

Traditional Baranja House

completed



2026/2027

Kopački Rit at Heart

in progress



Adventure in the Manor

In the first school year, students explored the Eugen Savojski Manor in Bilje – its location, history, dimensions and surroundings, and its importance for the municipality's tourism.

Subjects involved: Mathematics, Physics, Computer Science, Art, Nature and Biology, History, Geography, Croatian Language, and the School Library.

History and Geography — a compass treasure hunt and a visit to the State Archives in Osijek

Mathematics and Physics — measuring the manor's dimensions and comparing them with archival data

Mathematics and Computer Science — a 3D model of the manor and 3D-printed keychains

Nature and Biology — exploring the plant and animal life around the manor

Library — making posters and brochures about the manor

Art — magnets, painted bags and paintings of the manor

Croatian Language — a picture book about the manor, written and illustrated by students

All Subjects — a joint board game and a presentation at the Ethno Fair



Eugen Savojski Manor, Bilje

100
keychains (3D printed)

75
brochures about the manor

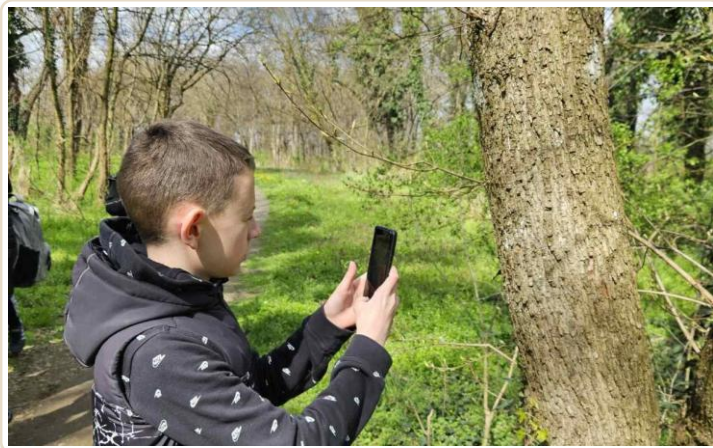
10
board games

30
picture books about the manor



From the Field to the Workshop

A treasure hunt and measuring the manor, observing nature in the park, and presenting the results at the Ethno Fair.





Bilje Steppe

PROTECTED NATURAL MONUMENT

157

plant species

47

families

Bilje Steppe is one of the last steppe grasslands in Croatia, located at the local cemetery in Bilje.

Subjects involved: Mathematics, Physics, Computer Science, History, Geography, Nature and Biology, Art, Croatian Language, and Primary Educations.

History and Geography — comparing the world's steppes on relief maps, researching steppe conquerors

Mathematics and Physics — measuring the perimeter and area of the Bilje Steppe

Mathematics and Computer Science — 3D bookmarks designed in Tinkercad, a VR plant-hunting game

Nature and Biology — a digital herbarium from the Red Book, an educational Memory game

Computer Science — brochures about protected plants

Art — polymer clay jewellery featuring protected plant motifs

Croatian Language — a picture book and colouring book about the Bilje Steppe

Primary Educations — soaps and embroidered bags featuring endemic species motifs

200

3D keychains with endemic species

40

brochures about protected plants

10

educational Memory games

1

virtual VR plant-hunting game



Bilje Steppe in Action

Students survey the terrain with a drone, make clay jewellery, use digital tools, and present the results at the Ethno Fair.





YEAR 3 • 2025/2026

COMPLETED

Traditional Baranja House



A traditional Baranja house

The project involves 14 teachers across different subjects: Mathematics, Physics, Art, Computer Science, Croatian, German, English and Hungarian Language, History, Geography, Chemistry, and Primary Educations.

Local Heritage Group and Primary-Grade Instruction — corn-husk dolls, model of a house with furniture

Student Cooperative — a map of Bilje's spatial development and a plywood house model

Computer Science — a digital Baranja Cookbook with a QR code

Robotics — STEAM whistles designed in Tinkercad and 3D-printed

Nature and Chemistry — soaps made from natural materials

Creative Project Workshops — a visit to a traditional house, making stencils and wall painting

Art — wall ornaments and an educational Memory game

Croatian Language and Media — a brochure and educational poster, an exhibition, and the Ethno Fair

30
corn-husk dolls

3
house models

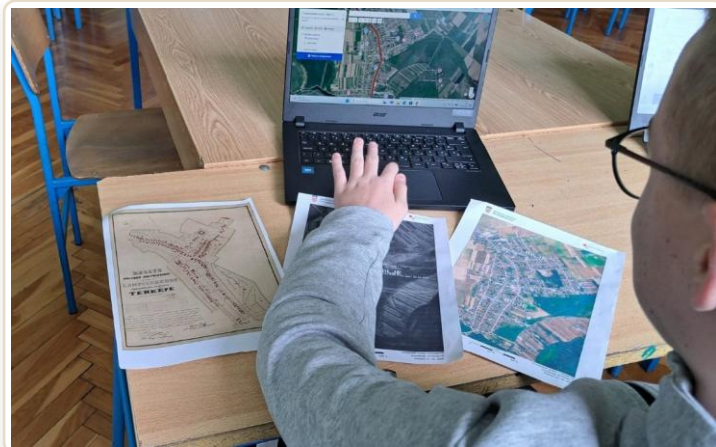
40
copies of the Baranja Cookbook

80
natural-material soaps



The House Takes Shape, Step by Step

Students research historical maps of the homeland, make corn-husk dolls and soaps, build and paint house models, and present their work at the Ethno Fair.





UPCOMING • 2026/2027

PLANNED

Kopački Rit at Heart

Connecting the school and local community through Kopački Rit as an outdoor classroom, supporting family tourism, developing entrepreneurial skills, strengthening environmental awareness, and learning through field research.

Subjects involved: Mathematics, Computer Science, Art, Nature and Chemistry, History, Geography, Croatian, English, German and Hungarian Language, and Primary Educations (17 teachers).

Planting native fruit trees

Insect hotels

Weather station

Augmented reality sandbox

Clay souvenirs

Multilingual animal brochures

Educational puzzles and photo exhibition

AudioMoth — sounds of nature



Project Partner

Kopački Rit Nature Park

15
native fruit tree varieties

15
insect hotels

100
clay frog souvenirs

50
educational puzzles

The “Bilje Through the Eyes of STEAM” project has been running for three years, and Kopački Rit at Heart is its fourth chapter.

CONCLUSION

“Through four years of an interdisciplinary approach, we have taught our students to research, create, and care for the place they call home. By combining traditional knowledge with modern tools – 3D printing, virtual reality, field research – we are raising a generation that values its heritage, its natural environment, and its community, and knows how to care for them.”

STEAM THREADS THROUGH FOUR YEARS OF THE PROJECT



Thank you to all the teachers, students and collaborators for their dedicated work! The project continues with a new theme from our homeland.

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