



Sparkling Science >

Science linking with School School linking with Science

Research Project

01.09.2010 – 31.08.2012

Alpine Salamander

Distribution and development of the alpine and the fire salamander in Salzburg

LEADING INSTITUTION

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SCHOOLS INVOLVED

• BG Tamsweg • BG/BRG Hallein • BG/SportRG Saalfelden
• Erzbischöfl. PG Borromäum • HS Bramberg • NMS Taxham
• Praxishauptschule der PH Salzburg • Sport-RG/Musisches
RG/SSM Salzburg • VS Aigen • VS Annaberg • VS Bruck • VS
Dorfgastein • VS Edt Mödlham • VS Elisabethen • VS Göriach • VS
Guggenthal • VS Hintersee • VS Kleinarl • VS Krimml • VS Leogang
• VS Maria Alm • VS Niedernsill • VS Stuhlfelden • VS Tamsweg
• VS Taxham • VS Voglau • VS Zederhaus • VS Werfen • VS
Werfenweng • VS Weißbach (all in Salzburg)

PROJECT WEBSITE

www.alpensalamander.eu



Basic Information about Sparkling Science

Sparkling Science is a research program of the Federal Ministry of Science and Research (BMWF) which started in 2007 and adopts an unconventional way in the promotion of young scientists that is unique in Europe.

The specific characteristic of the program: so far 168* projects (94 of them have already been completed) scientists work side by side with young people in current scientific research projects: Sparkling Science supports big research projects and supported from 2007 until 2010 also smaller school research projects.

In the 114 big research projects (42 have already been completed) the young colleagues take an active part and work independently on parts of the research projects. As junior colleagues they introduce important suggestions into the research approach. They collaborate in the conception and conducting of investigations, conduct polls, collect data, interpret these together with the researchers and present the results at schools, universities and even at scientific conferences.

In a second initiative within the Sparkling Science program the BMWF awarded grants to smaller projects that were submitted and conducted not by the involved research institutions, but by the schools, who designed and lead the projects themselves. In these projects, too, schoolchildren worked closely together with researchers, supporting state-of-the-art research activities and contributing to the results.

Both sides of the program is/were open to a broad thematic spectrum. Research is carried out on all sorts of different topics: from mechatronics and molecular biology to migration research, from acoustics and biometrics to literature research.

* Status quo: January 2012



One Example out of 168

Alpine Salamander

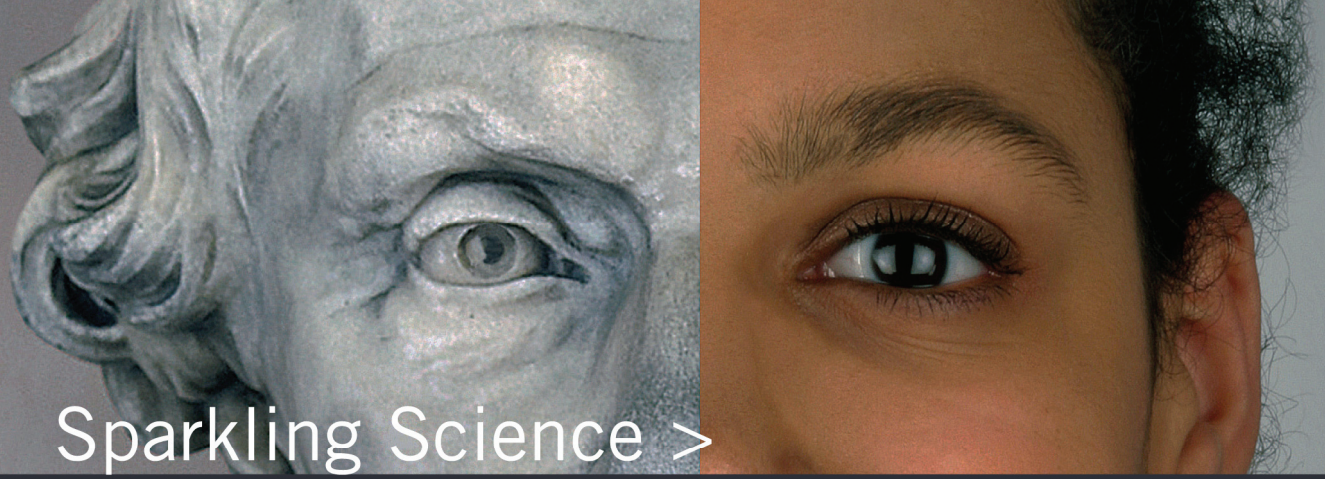
The alpine salamander (*salamandra atra*) is a pitch black amphibian, which lives in our alpine regions at altitudes between 600 and 2.400 m. Its close relative, the fire salamander (*salamandra salamandra*), is black with yellow spots or stripes and lives in mixed broadleaf forests up to 1.500 m. Both are endangered and strictly protected according to the European FFH guidelines. Hence, efforts to research their habitat and ecology as well as measures for their conservation have highest priority.

Despite their central role in the alpine ecosystem our actual academic record is embarrassingly small. In fact, we know very little about their actual distribution in the Austrian Alps. In order to resolve this shortcoming, this project reaches out to 30 schools to explore the population and distribution of the salamanders in the county of Salzburg, Austria.

The main goal is to map occurrence, population-size and development of the alpine salamander and the fire salamander. Here we will take two approaches. First, we will establish an oral history of salamander observations in the past 50 years by conducting interviews in the local community, such as alpinists, farmers, national park staff, mineral collectors and hunters to preserve their well-versed local knowledge of the salamanders. Second, we will check these regions for actual salamander observations. These data will be collected by school kids and disseminated on our web portal www.alpensalamander.eu. The project will be carried out at the University of Salzburg in collaboration with 30 schools in the county of Salzburg.

School kids will learn about various topics like the biology of amphibians, conservational biology, research methodology and documentation, Web 2.0 applications, Google maps.





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Austrian Federal Ministry of Science
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