

How fireflies in the arts can save natural fireflies

Cooperation between artists, naturalists and environmentalists in the Swiss Glowworm Project

Abstract: Glowworms seem to be good indicators for well-structured biotopes with low disturbance and high species-richness. Preservation of glowworms and other fireflies as well as their habitats requires motivation of the public. As fascinating animals connected with different cultural traditions and various fields of mental associations fireflies are attractive topics for creative artists. Experiences in Switzerland and Northern Italy since 2005 show that cooperation between artists and environmentalists lead to efficient synergies and demonstrate that fireflies in the arts may contribute to the preservation of the "real" fireflies.

Attractive indicators

"Firefly is an indicator of non-disturbed ecological systems," HM Queen Sirikit noted 1996 on the occasion of a visit in the Chiang Mai Botanical Garden, where twelve years later to celebrate her birthday this International Symposium on "Diversity and Conservation of Fireflies" takes place.

Queen Sirikits remark is applicable also to the most common firefly of Switzerland, the glowworm *Lampyris noctiluca*. The studies of the *Glühwürmchen Projekt* – an association of naturalists, environmentalists, gardeners and artists interested in glowworms and their preservation – during the last few years show that glowworms are indicating habitats of high structural diversity, often at the edge of woods and close to extensively used grassland (wet or not) and they are normally associated with a large number of interesting, at least regionally endangered and rare species.

To win the support of people for the preservation of such frequently threatened living spaces it's necessary to establish a human relationship to these biotopes and their resident plants and animals. Contrary to the vast majority of species, fireflies are not only good indicators but also connected with a huge number of associations in the human mind. They represent like hardly any other mid-European animal the magic of nature and remind of warm midsummer nights and holidays in the south, of childhood and the so-called good old times. Glowworms are symbols of unsaved lost souls and the loss of nature, signify sex workers (in Italy) and appear as topic of popular songs and romantic legends.

Therefore the association *Glühwürmchen Projekt* (glowworm projekt), founded in 2002, collaborates in the area of Zurich with creative artists who work in the fields of associations and significations around fireflies. This way the status of

glowworms should be positioned in the mental "internal" landscape which creates a base for the protection of glowworm habitats in the "external" landscape.

Zurich Glowworm Festival

Inspired from related events in East Asia in summer 2005 the *Glühwürmchen Festival* took place in the area of Zurich and Schaffhausen in the northern part of Switzerland. According to the interdisciplinary approach the festival program contained not only many nightly excursions into glowworm habitats but also a specially developed production of a play on the stage of the *sogar theatre* located in Zurich, a cinema show (*Hotaru no haka - Grave of the Fireflies*, Japan 1988), an artistic-scientific glowworm workshop for children and a grand display of fireworks implemented by a class of the Zurich University of the Arts frequented by about 700 persons. Finally the German artist Klaus Geldmacher and his Swiss-peruvian friend Francesco Mariotti realised an exhibition in an art gallery and created installations and art objects (multiples) for the Zurich glowworm festival. These two visual artists have occupied themselves since 1989 with light objects relating to fireflies stimulated by the manifold associative surroundings of the fascinating bioluminescent beetles.

It's not easy to make out the effect of the collaboration between artists and environmentalists during the festival. At least it seemed to succeed in breaking borders between the arts and nature and to stimulate new interests: people interested in the fine arts gathered for nighttime glowworm expeditions on the outskirts, cemetery gardeners visited theatrical performances and environmentalists found the way into art galleries.

Not least due to the interdisciplinary approach of the *Glühwürmchen Festival* in Zurich the glowworms reached a certain position in the appreciation of a part of the population. Since a few years ago the Office for Nature Conservation of the town of Zurich includes the information about the distribution of *Lampyrus noctiluca* and his environmental demands in his daily business. Different glowworm sites have been improved during the last years. And as a renowned German tourist guide to Switzerland published in 2008 notices, Zurich seems to be the only town with an official contact point for glowworm observations.

In the small town of Schaffhausen lives the only big population of *Lamprohiza splendidula* of the northern part of Switzerland. Because of that the glowworm festival integrated Schaffhausen into the program and offered some events in the town near the German border such as theatrical performances and excursions to the local forest cemetery, an outstanding firefly habitat. Since then glowworm watching at the beginning of July guided by zoologist Ingo Rieger, an active member of the association *Glühwürmchen Projekt*, has become a tradition

in the Schaffhausen forest cemetery. In 2008 more than 300 people participated in the walk to the *Lamprohiza* population between trees and graves. In the same year, the Offices for Nature Conservation of the Town and Canton of Schaffhausen charged the *Glühwürmchen Projekt* with a study concerning the distribution of *Lamprohiza splendidula* and steps to preserve and to improve the local firefly habitats.

GLOW UP! in Turin

The close cooperation between biologist Stefan Ineichen and artist Francesco Mariotti within the glowworm project started to produce new fruits when Mariotti who already worked in many European countries, in different South American cities and in Japan was invited to participate in developing *The Park of Living Arts* (*Parco d'Arte Vivente PAV*) in Turin. *The Park of Living Arts* spans 23 500 qm and is located in a formerly industrial area in midtown Turin. Piero Gilardi, leader of the PAV project, wishes to make interaction between the arts and nature, men and environment a subject of discussion in the center of a large industrial city in Northern Italy.

With his project *Immigration* for *The Park of Living Arts* Francesco Mariotti proposes a transition from an artificially illuminated and animated park to a habitat for glowworms in a process lasting over several years. Fascinated likewise from the natural magic of fireflies and the omnipresent trash of the global consumer society Mariotti works often with light-emitting diodes (LED) packed in deformed PET bottles. His so-called *Hybrid Gardens* consisting of luminous multicoloured bottles allude to the bottles filled with bioluminescent click beetles he saw in some faraway places without electricity during his childhood in Peru.

Soon after the installation of Mariottis artificial fireflies in *The Park of Living Arts* landscape architect Gianluca Cosmacini and the Italian environmentalist and firefly expert Giuseppe Camerini will plant a row of trees and bushes to shade the glowworm habitat which will be created by planting wood and grassland rich in species, installing both humid and dry sites. Finally glowworms will be imported from a source population site: natural fireflies will replace artificial ones.

After a discussion of Francesco Mariotti and Stefan Ineichen with the PAV project management in January 2007 Tea Taramino, Orietta Brombin and other members of the PAV Creative Research Section developed *GLOW UP!*, a brilliant campaign involving more than 1700 pupils and students of all levels from elementary school to university which have been provided with a GLOW UP-kit containing information about glowworms, a sheet of black paper, a reflecting silver foil and a postcard reserved for noticing free thoughts (about fireflies).

During the summer of 2007 the young artists cut the silver

foil into pieces and created compositions of flashy patterns glued on black background sheets showed in a PAV-exhibition in autumn. Pupils and students sent postcards with sentences like "I have never seen a firefly but I wish I could see a lot of them, at least one" or "The first time I saw a firefly it seemed to be a falling star approaching me what I didn't like at all" or "This project is very usefull to understand that nature still exists." And finally many of the young amateur researchers followed the invitation to look for glowworms on midsummer night walks in Turin, where they found the lightning beetles (*Luciola italica* and *Lampyris noctiluca*) in about twenty places in parks, gardens and along the river shore.

The experiences in cooperation of artists and environmentalists in Switzerland and Northern Italy during the last years show that a fertile interaction between environmental knowledge and the arts is possible which leads beyond mutual exploitation and opens new perspectives to both sides. While the artistic production avoids the risk of self-referring and reaches ecological relevance, the activity of the environmentalist gains in significance and acceptance through integration into a cultural context. And maybe some natural fireflies can be saved thanks to the fireflies in the arts.

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*www.gluehwuermchen.ch
www.mariotti.ch
www.parcoartevivente.it*