

## Dear BioNova Partners & Customers,

In this month's newsletter, we would like to introduce you to BioNova France, our partners based out of Sète, France. As such, we have chosen a lovely BioNova Natural Pool at a hotel in France for our featured 'Project of the Month'. If, like us, you're already thinking about ways to extend the swimming season, you can also read up on all of the water-heating possibilities available for BioNova Pools.

Your BioNova Global Head Office Team

Rainer Grafinger, Christine Schoeck, Andrea Enseleit, Stephanie & Jusuf Rifatov

## Project of the month



At the picturesque place St. Cybranet in France (Dordogne) lies the hotel „Domaine du Fraysse“. Completely devoted to ecology and sustainability, it's no wonder that the hotel decided to offer its guests a chemical-free alternative for swimming and bathing. So in 2004, BioNova Partner Niklas Sobotta got the contract for building a 250 m<sup>2</sup> natural swimming pool. The swimming area is 3 meters deep in most parts, but Niklas Sobotta also integrated a gentle stepped slope into the design so that families with young children can also enjoy the pool. People who want a little more excitement can also jump off a diving rock into the swimming zone.

The regeneration area is planted with water and marsh plants that regenerate the used water from the swimming area.

The owner of the hotel profits from this natural pool in two regards: For one thing, the biologically-cleaned swimming pool stands out among the many hotels with traditional chemical pools, and attracts guests who are looking for a unique and eco-friendly experience. Secondly, the maintenance costs for the natural pool are much lower than for a chlorinated pool because there's no need for expensive chemical water-treatment products.

## The BioNova Family



The BioNova System was originally developed in Austria. By the late 80's they were already building natural swimming pools according to this system.

In 1996, Dipl.-Ing. Rainer Grafinger started to establish the BioNova branding in Germany, and today the BioNova Family has members all over Europe, and in the United States, Canada, Australia, Asia and Africa. The company Stella maris owns the exclusive BioNova license for France. Based in Sète, France, the two managers of Stella maris, Serge Paz and Touati Clair, work hard to establish natural pools in France.

Meanwhile, they supervise 15 French partner companies that build BioNova

Natural Pools. Paz and Clair regularly offer training events and tutorials to inform their partners about the latest state-of-the-art techniques. In addition, they maintain local public relations, operate an informative website ([www.bionova.fr](http://www.bionova.fr)) and publish a French BioNova newsletter.

As natural swimming pools (NSPs) are a relatively new product in their country, they often have some consumer misconceptions to deal with. Cloudy water and uninspired design is what crosses some people's minds when they first hear about NSPs. But this is certainly not the reality, as has been proven by many successful BioNova Natural Swimming Pools. Each new project helps to further boost confidence in the concept of biological water treatment, such that Serge Paz sees BioNova France headed in the right direction in terms of establishing the BioNova brand and the natural pool concept.

He feels that the specific strength of the French Partners is their savy way of combining biological water treatment exclusively with designs that look like traditional pools, not ponds. (Most of their clients want their NSP to look like a traditional swimming pool.) The biological pool (in Sète) shown above is a very good example of this; Because of their innovative construction methods, the ecosystem stays intact and healthy even when temperatures get very warm and the NSP is used heavily.

## Dates 2011

Training events, fairs, meetings – we've got a lot going on with the BioNova Family! Review the following to see where the next activities of the BioNova Global Head Office and the BioNova Partners will take place:

### May 2011

#### Open house day

May, 7 - 8, 2011, Wickrange (Luxembourg)

The company Plantations Weisen will open its doors for all interested people these days.

Contact: Plantations Weisen

19 rue des 3 Cantons

3980 Wickrange / Luxembourg

Tel: +352 (0)-379149, E-mail: [weisenre@pt.lu](mailto:weisenre@pt.lu)

#### Hands-on course on maintenance of NSPs / biological pools

May, 14, 2011, Binningen (Switzerland)

On Saturday, May 14, 2011 our Swiss partner VIVA Gartenbau AG (Bündtenmattstr. 19, CH-4102 Binningen) will offer a hands-on course about the maintenance of natural swimming pools and biological pools.

To find more information, please visit: <http://www.viva-gartenbau.ch/html/4veranstaltungen.html>

#### Aqua-Therm

May, 16 - 19, 2011, Kiev (Ukraine)

The BioNova partner „Homepark“ will represent BioNova NSPs and biological pools at the 13th Aqua-Term in Kiev. For further information, please visit:

<http://www.aquatherm-kiev.com/>

### June 2011

There are no dates for June 2011 yet.

## Double anniversary for Högl & Mandlmeyer

The company Högl & Mandlmeyer has been a member of the BioNova family since 2010.

This year Markus Högl and Georg Mandlmeyer are celebrating a double anniversary: 15 years of gardening and landscaping and 10 years selling natural stones and gardening products.

Markus Högl established his own business 15 years ago. He then teamed up with Georg Mandlmeyer in 1998. The successful gardening and landscaping company grew slowly but continuously. In 2001 they grew their business and started selling natural stones.

The BioNova Global Head Office Team wants to congratulate Markus Högl, Georg Mandlmeyer and their staff on this double anniversary!

## Heating of Natural Swimming Pools



These days it usually goes without saying that a swimming pool will be heated, quite contrary to the earlier natural swimming pools. They were designed very simplistically and clients tolerated lower water temperatures. Over time NSPs started to look more like traditional swimming pools and became no longer a product for only a small group of nature lovers. Instead, it became very modern and almost trendy to have an NSP in your own yard.

New technologies in water treatment, that have developed as a result of recent research, now make it fairly simple to heat natural pools. The NSP shown in the picture for „Hotel Dalnig“ in Austria is a good example.

But there are a few basic rules:

For example, the solar collectors used in conventional pools should not be used to heat NSP water. In a conventional pool, bathing water is led through black tubes in which the water temperature cannot be controlled, possibly reaching up to 60° C. This is too hot for the zooplankton in an NSP. Additionally, warmer water can lead to increased bacterial levels. On the other hand, water in the pool (not in tubes) only gets warm when the sun is shining, which means chilly mornings and shivering swimmers. So it is now suggested that a heat exchanger be installed between the water and heating system. As this is the only way to control the heat of the water, BioNova experts invented a special heating module for NSPs, which can be installed between the biological pool and the heating system. A stream of pool water is directed through the heat exchanger. The maximum temperature can be regulated by a simple pool control.

Because solar collectors are not reasonable for heating the water in an NSP, other sources of heat must be utilized. There are some different possibilities:



## 1. The existing heating system of the house:

To use the existing heating system of the house, an expert must check to see if the system has a high-enough heat capacity for the job. In most cases, the heat capacity should not be an issue because the house won't require a lot of heating during spring, summer and autumn. If you build a new house and also plan to have a biological pool with heated water, you should make sure to install a heating system that can heat both your house and pool.

## 2. Solar panel:

Solar panels are the most ecological alternative. They work best when installed on the roof of the house. In the winter, when the pool is not being used, and in the middle of the summer when the pool is already warm enough, the solar panels can be used to supplement the home's hot water system. It's also useful to install a boiler in order to have warm pool water early in the morning.

There are also some other systems on the market that can be used without a heat exchanger. Heat pumps, for example, can be used, but they are not energy-efficient. In Switzerland, it's illegal to use heat pumps at all. With a heat pump, water is heated by electrically-heated hot air. As the temperature of bathing water can be increased only 1 - 2°C / 48 hours, this method is not efficient. The costs for heating an NSP of 110 m<sup>3</sup> by heat pumps would be about 800 – 1,000 €/year. It's definitely useful to install an automatic pool cover in an NSP so that the water doesn't have a chance to cool down so much overnight.

## BioNova Historical



In 1998 BioNova built a beautiful hillside NSP in Ampfing (Bavaria/Germany). The customer wanted to create an extraordinary NSP in his yard.

The builders made good use of the sloping property to design 2 NSPs, one flowing into the other. A man-made spring flows along the course of a stream from the terrace of the house into the first NSP. From here a waterfall flows down into the second NSP below. The second NSP is 3 meters deep so that the owner can jump into it from the rocks surrounding the waterfall.

Used water flows through an overflow gutter and into a reservoir, where a pump sends the water back to the spring 10 meters above.