

## Dear BioNova Partners & Customers,

Winter is almost here and it's definitely time to get NSPs or biological pools winterized, so we'll provide you with some practical tips for how to do it in this newsletter. Our Project of the Month shows you how beautiful a naturally-designed NSP can be. Of course, we also want to introduce another member of the BioNova Family -this time it's a very experienced and successful partner from Austria, the Teuffenbach company. And as the NSP is more of an "eye-catcher" than a swimming hole at this time of year, we want to inform you about the possibilities and magical aesthetic of modern lighting options. The BioNova Historical section features a NSP which was build in 1994. As you will find, we have gathered a lot of interesting information for you this month. Enjoy reading!

Your BioNova Global Head Office Team

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

## Project of the month



This month's NSP is located near Schwabmünchen (Bavaria). What makes it so special is the fact that the owner built this 1,076 ft<sup>2</sup> NSP on his own, without contracting a builder. BioNova founder Rainer Grafinger planned the NSP and also supported the owner with technical advice. The swimming area is about 11.5' deep and the NSP is designed with a very natural aesthetic.

The NSP was built back in 1998, though the photo was taken this year. The regeneration area is beautifully planted with various kinds of water- and marsh-plants, resulting in a NSP that looks almost like a natural lake.

The water plants which were planted in the special BioNova substrate absorb all the surplus nutrients from the water so that algae have little food and thus no chance to bloom.

## The BioNova family



Hermann Kratzwald of the company Teuffenbach Gartenservice GmbH, based out of Steindorf (Austria), has been a BioNova partner since 1999.

For the last 20 years, he has been intensively engaged with the topic of water in gardens, and he has built many BioNova Natural Swimming Pools in his home country, Austria. He has been successful in designing creative private NSPs as well as several interesting hotel projects, in coordination with the BioNova Global Head Office. Because heating pool water is a very important function for such hotel pools, he also worked together with the BioNova Global Head Office on developing a special BioNova heating module.

Often, he has installed solar panels for the ecological heating of pool water. The remarkable thing about heating water with solar panels is that the remaining energy can also be used for other purposes on-site, such as heating tap-water or even buildings.

Kratzwald has delivered many technical lectures about NSPs at seminars and training events. As an official expert for private and public natural swimming pools, he provides technical evaluations for court cases and private persons, and also offers professional water analyses.

Besides all this, he is also the manager of the Teuffenbach Gartenservice GmbH, a gardening and landscaping company.



## 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:

## November 2011

### Pool Spa Patio

November 2-4, 2011 - Las Vegas (USA)

The BioNova Head US partner James Robyn (BioNova Natural Pools) presents BioNova NSPs at this important fair. As this segment of the pool industry is not well-established in the USA like in Germany, Austria or Switzerland, he has to do real „pioneer work“. At his booth he will inform all interested fairgoers about the basics of the BioNova System and the fully biological water treatment. Please find further information about Pool Spa Patio under: [www.poolspapatio.com](http://www.poolspapatio.com)

## Looking back - Aquanale 2011



At this fair for swimming pools in Cologne, Germany, Rainer Grafinger welcomed visitors from all over the world at the BioNova booth, supported by local BioNova partners. All in all, the fair was quite successful again this year. Mr. Grafinger and his supporters met many interested companies and individuals.

## Looking Forward - January 2012

We are pleased to announce a 2-part training program for designers and builders seriously interested in BioNova Natural Swimming Pools.

**BE PART OF THE GREEN MOVEMENT!**

**YOU WILL LEARN THE TECHNICAL ASPECTS OF NSP DESIGN, HOW TO WORK WITH CLIENTS TO DESIGN NSPs AND HOW TO PROFIT FROM BEING IN THIS EXCITING NEW MARKET!**

**DESIGN GREEN TO EARN GREEN!**

The first part of this program will be a 3-day session featuring the following speakers:

**Anthony Archer-Wills**

A world-renowned pond designer originally from England and now living in the USA, Anthony collaborates with BioNova in designing natural swimming pools. He will talk about design and construction techniques and his specialty – designing for an entirely natural look.

**Rainer Grafinger**

Head of BioNova Global from Munich, Germany. Rainer has planned the construction of both residential and public NSPs on 5 continents and has shaped the growth of the natural swimming pool industry since its beginnings. He will discuss the evolution and current state of natural swimming pools globally.

**James Robyn**

As head of BioNova in North America, Robyn will present information on NSP standards, construction techniques, limnology and technical design criteria.

**Robin Templar Williams**

A British garden designer recognized as one of the industry's most accomplished designers, Robin will lecture on the art of design as it relates to NSPs.

Find further informations:

<http://www.bionovanaturalpools.com/upcoming-onedayseminars.html>

The second part of this program will be a 2-day technical session with Grafinger and Robyn that will be open only to BioNova Partners.

Please contact our US Partner of BioNova Natural Pools for details (<http://www.bionovanaturalpools.com/index.html> or [james@bionovanaturalpools.com](mailto:james@bionovanaturalpools.com))

## Maintenance of Natural Swimming Pools in Autumn



Autumn's here and the leaves are falling from the trees. Some NSP owners may wonder if they really have to remove the leaves from their NSP. Although this is tough work, leaves should never be left to rot in the water because they would create sediment on the pool floor. This would lead to a surplus of nutrients and, consequently, to algal growth come spring. So the water surface must be cleaned in autumn regularly. A smart solution for this problem is to put a net over the NSP so the leaves can't get into the water and can also be easily removed. But be careful: The net must be removed before the first snowfall or before the NSP begins to freeze.

It's also time now to cut back the water plants. They should be cut

to about one hand-width above the water surface. You should also remove all yellowed and dead leaves from the water lilies and other water plants. Take care to remove all debris so it doesn't sink to the ground and create sediment.

The pumps will endure winter without problems so long as they are drained completely, in order to avoid frost damage. When doing this, please remember to first unplug the pump from the energy grid! Then close all ball valves and open the two drain plugs. One of those is placed in the pump housing near the motor, the other one is in the pump body. Now the pumps are winterized.

If you have any further questions concerning the maintenance of natural swimming pools in autumn, please contact the BioNova Global Head Office at Günding or your local BioNova partner.

## Lighting of Natural Swimming Pools



The bathing season is over, the days are getting shorter and the hours without sunlight are getting longer. However, we can create great visual effects in and around our NSPs with the smart placement of light sources. Variations of light and shade on the water are a magical sight. Additionally, light also makes your NSP safer at night. Those who like to take a midnight dip in the pool will appreciate swimming in water that is not pitch-black.

Ideally it's best to include a lighting plan in the original design of the NSP. But it's also possible to upgrade a lighting system within an existing NSP. Even smart location of light sources nearby the NSP can create interesting shadow play. A very popular choice for

this instance is to use bowl-shaped lamps or LED-lights, which can create varying or constant colorful lightshows. The NSP can even be made to glow yellow, green, blue, red or purple. Or you can highlight certain interesting elements with a spotlight.

If you want to install special underwater lighting post-construction, you can use a lighting system based on chemical fiber optics (German: Kunststofffaser-Lichtleiter). With this system, light is produced outside the NSP and then transported by the chemical fibers to a lamp on the pool floor. The chemical fiber only transports the light, not electricity, so using this system is completely safe.

It's up to the every NSP owner to decide how brightly she wants to light up her pool. The most important thing is to install any lights 20" – 24" under the surface of the water. The lights also must be chosen according to the construction of the pool basin, and you always have to use special underwater lights only. To avoid electrical accidents, you should always contact an expert to install lights in and around your NSP.

## BioNova historical



In January 2011 the Federal Environment Agency published in a press briefing that reactions to chlorine may cause asthma in some people.

They further mentioned that chlorine in close contact with urea may cause a substance which may cause asthma. Because of this, experts advised parents with certain allergies and asthma problems not to take their babies swimming in pools anymore.

While you may find this advisory to be overly-cautious, chlorine in bathing water is not a completely harmless chemical. Even people who have no allergies at all

recognize the consequences of chlorine in bathing water: red eyes and dry, itchy, irritated skin.

As early as 1994, some doctors from Radenthein, Austria were recommending that nobody should have any more contact with chlorine than necessary. Even so, they wanted their grandchildren to be able to swim. For that reason they decided to have a 3,885 ft.3 BioNova NSP built - guaranteed to have no chlorine or other pollutants. In keeping with the owners wishes, the NSP was designed with a quite natural aesthetic. They also built a small shallow-water area that is separated from the deep water zone by a wooden deck. That way, even their youngest grandchildren could feel safe in the NSP.

Although the grandchildren are now grown, the NSP is still in use today.