

More about Sphagnum Moss and the Benefits of PoolNaturally® and SpaNaturally®

The leaves of the plant contain natural water conditioning agents

The Native American Ojibwa Indians of White Earth and Red Earth, Minnesota, consider it sacred for its healing powers. The Japanese use it to wrap delicate, expensive orchids. And nature has been using it forever to give lakes their pristine water quality. Sphagnum moss – the generic term for the breakthrough water-conditioning substance used in the PoolNaturally and SpaNaturally products – has been conditioning water around the world for eons. And yet, its recent “discovery” as a revolutionary innovation in pool, spa and hot tub maintenance for its water-clarifying properties could make it one of the most significant “green” products ever introduced in the \$9 billion pool, spa and hot tub industry.



Sphagnum moss plant from New Zealand in its natural state

There are hundreds of different species of sphagnum moss and it is plentiful across the world. Sphagnum moss is a soft, lush plant with small leaves that typically grows in bogs as a layer of vegetation, almost floating on the water underneath. When it decays, it becomes peat. Leaves from the plant are used in the production of PoolNaturally and SpaNaturally.

Sphagnum moss is found in the higher latitudes of both the northern and southern hemispheres. Much of northern Minnesota and southern Ontario are covered with moss bogs. Similar latitudes in Europe, Russia, Chile and New Zealand (where Creative Water Solutions sources it for production) also contain large areas of Sphagnum moss bogs.

Commercial Uses

Today, Sphagnum moss is harvested in Wisconsin, Scandinavia, Chile and New Zealand, mainly for applications in the flower industry where it is used to germinate plants and wrap orchids. In Wisconsin, machines are used to harvest the moss, while in New Zealand it is harvested by hand and transported out of the bog by helicopter to prevent any environmental damage. It grows in 18-36 months after harvesting from the roots and seeds left behind in the bogs.

From the bogs of New Zealand to your pool and spa anywhere in the world

Once harvested, the New Zealand moss is processed for pools and spas.

- The leaves of the moss are dried on racks or under large industrial blowers
- The moss is then compressed and cut into different-sized units for pools and spas
- The moss is shipped to the Twin Cities where it is ETO sterilized to kill any microbes that may be present
- The different-sized pieces are fitted into blue-mesh containers resulting in inserts that look like large, flow-through tea bags by a team of adults from Lifeworks (www.lifeworks.org)
- Once the pool and/or spa has been prepared, the inserts are placed into the water and go to work (See FAQs at <http://www.cwsnaturally.com/science/faq.php> about usage)



The special flow-through sphagnum moss inserts for pools, spas and hot tubs

How the moss works in pools and spas

Before going to market, years of testing and research were conducted on sphagnum moss' effectiveness in conditioning water. CWS found that the moss acts like an absorptive filter, a buffer, and releases water conditioning agents to improve water clarity and quality while inhibiting biofilm formation (See Biofilm Backgrounder in Media Kit or online <http://www.cwsnaturally.com/about/media.php>).

- It actively removes ions from water through an ion-exchange process located within the pores of the leaves of moss.
- This ion-exchange process binds specific molecules such as iron, calcium, mercury, lead and cadmium.
- Once bound, the molecule is removed from the fluid.
- The moss likewise actively buffers the pH of a solution. Once the pH of a solution is set, these buffers keep the pH stable over a period of time.

PoolNaturally®

SpaNaturally®

The Benefits of Using PoolNaturally and SpaNaturally

- **Better pool and spa water clarity and quality**
- **Greater alkalinity and pH stability**
- **Less foaming and odor**
- **No more burning eyes, dry hair and skin, or bleached swimwear**
- **Less impact and repairs to internal plumbing, pumps and heaters, and surfaces and liners of the pool or spa**
- **Fewer water changes (and lower water bills)**
- **Easier pool and spa maintenance (up to half the time usually)**
- **Less pool chlorine and bromine for the spa (for extra cost savings)**
- **Less additives needed, including shock, algaecide, stain remover, scale remover, cyanuric acid, and cleansers (another added cost savings)**
- **Silkier, softer water is one of the lasting benefits of using both products**
- **Time-enhanced conditioning: Water improves with every new moss refill change**
- **Less chemically polluted waste water once you drain your pool or hot tub**
- **Earth-friendly: Both products are 100% biodegradable**