

Mid-Atlantic Koi

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The Benefits of Covering and/ or Heating a Koi Pond Over Winter

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One Example of a Pond Cover

The benefits of covering and/or heating a koi pond over winter are numerous. Below are listed some of the benefits:

- Higher minimum temperatures,
- Extended growing season while still accommodating for the four seasons,
- Moderation of temperature swings,
- More controlled increase of rising temperatures in spring and dropping temperatures in autumn, and
- Decreased stress on koi results in higher immunity, less susceptibility to pathogenic bacteria & parasites.

Having the ability to moderate or even control your pond's water temperature to within a few degrees can add to your enjoyment of the



Room for All!

koi hobby in addition to the many benefits for your koi. Why? Because longer growing seasons where you can enjoy your koi being active, feeding, less stressed, with higher immunity and more resistance to disease, thus the potential for fewer health issues, that's why!

Enter "aeromonas alley" or the much debated concept there of, loosely defined as the temperature range between 45-62°F which occurs primarily in spring (when immune systems have been shut down all winter), when parasites and bacteria begin multiplying before the koi immune system kicks into full operation. Some areas of the country (like North Carolina) experience wide temperature fluctuations in spring where water temperatures may get up close to 70°F in March only to be followed by late winter cold spells which see water temps dropping back down into the 45-50°F range. It is these temperature swings which are stressful on koi and make them more susceptible to the affects of "aeromonas alley." This is where having a cover over your pond or even a heater to moderate temperature fluctuations and provide a more controlled environment for koi can be a good investment.

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Another Cover Design



Another Cover Design, continued on page 10



Another Cover Design – Continued from page 9



Covering your pond in winter is an inexpensive way to help your koi thrive, not just survive thru winter. Different parts of the country experience more severe winters than others obviously, but for most of us (except maybe in Florida type climates) using a winter cover can be beneficial for our koi. Depending on anticipated snow, ice & wind loads in your area of the country, a more substantial cover able to withstand expected conditions is warranted.

A covered pond in winter allows you to maintain higher minimum temperatures as well. Maybe your minimum water temperature with a cover in place will be 50°F, whereas without a cover water temps may have typically dropped down into the 40°F range, for example. A lot depends on your climate zone and also pond location (sun vs. shade). When you're talking 40°F water temperatures for a few months over winter vs. 50°F during the same time frame, that 10°F makes a BIG difference, even more so if the 50°F is a more stable temperature as provided by a pond cover and/or heater. Koi will come out of



winter and into spring with fewer problems given a less stressful winter.

Heating your pond is more efficient when a cover is in place, although not required. I have one of the earlier koi pond heater models which hit the market around 10 years ago, the Kozy Koi unit by AIMS. The Kozy Koi came shipped in a ready to hook up box, containing a Bosch Aquastar 114K BTU instant hot water heater, a TACO circulation pump, Digispans thermostat and two (or more) 300' coils of radiant floor heating coils. Given the early wide acceptance into the koi hobbyist market experienced by Kozy Koi, similar "koi pond heaters in a box" products soon hit the market from new manufacturers with one MAJOR difference – the radiant heating coils which had to be submersed in the pond or filter system were replaced with an inline heating unit.

Here are Pictures of my Kozy Koi, in operation for 5+ years now.



WORD OF CAUTION

YOU MUST resist the temptation to use increased temperatures as an opportunity to feed your koi year round (i.e. the perpetual summer). Current thinking is koi benefit from having a period of winter with a minimum duration of 8–12 weeks in 45–50°F temperature range. Females use this time to reabsorb eggs which may have been carried into winter. Colors, which have been stretched from the season's growth, have an opportunity to thicken. ❖