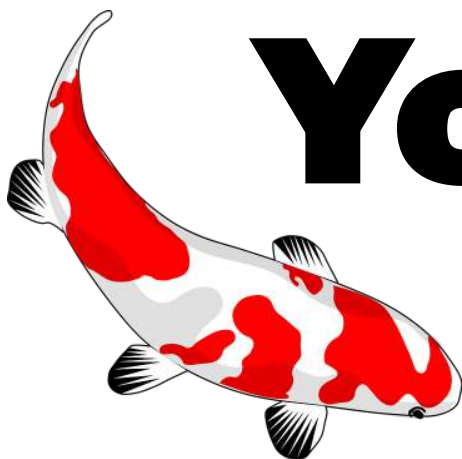


How to NOT Kill Your Koi



About Koi

- ◆ **Scientific Name:** *Cyprinus carpio koi*
- ◆ **Full Name:** Nishikigoi for “brocaded carp”
- ◆ **Origin:** Throughout Asia



Although they start very small, most koi can grow up to 18” long! Some can even grow longer than 36”! Plan ahead for the 30-40 year life of your koi

***All koi require 250 gallons PER FISH minimum!
Large breeding females should have up to 500 gallons.***

Fun Koi Facts

- ◆ Centuries ago, Common carp were kept as food fish. Over many generations of selective breeding of natural mutations, we have the many varieties of koi we know today
- ◆ Most expensive koi sold in 2020 for \$1.8 million dollars
- ◆ There are koi shows worldwide. Winners are based on body confirmation and color.
- ◆ The oldest koi, Hanako, was thought to be 226 years old.
- ◆ The largest koi on record was Big Girl, weighing 90 lbs at 4 feet long!



Many color varieties of koi

- ◆ Kohaku
- ◆ Showa
- ◆ Sanke
- ◆ Ogon
- ◆ Tancho
- ◆ Asagi
- ◆ Utsuri
- ◆ Chagoi
- ◆ Goshiki
- ◆ Bekko
- ◆ Karasugoi
- ◆ Hawiwake

Koi colors can change with age, water chemistry and genetics!



Koi Ponds



All koi MUST be kept in a filtered pond!
Tanks are too small for koi!

Your Koi's Ideal Home

- ◆ **At LEAST 250 gallons per fish**
Although they start small, almost all koi, even domestic ones, can easily grow up to 18" long. Sure, they start small at first, but plan ahead!
- ◆ **Temperature stability**
Koi can handle outside temperatures of anywhere from 32-85F (0-29C), but they require SLOW temperature changes. Insulate your pond, building it underground if possible, add shade structures and keep it deeper than 24" to keep your temperature consistent as possible.
- ◆ **Koi spawning can be violent**
During the spring, koi boys and girls may present spawning behavior. Usually, this is mostly identified by the boys chasing the girls. The girls may run into the sides of the pond, exposed plumbing, or even jump out of the pond. There is no practical way to avoid this, but keep a close eye on your fish during this time. Most of the eggs will be eaten or end up in your filtration.
- ◆ **Predator deterrent**
Koi can be exposed to many predators, including cats, racoons, predatory birds and larger mammals, such as otters. Although not aesthetically pleasing, the best predator deterrent is a net across your pond. Other options include monofilament strings, ultrasonic devices, electric fences or your faithful dog.
- ◆ **Koi need friends**
Although some koi do okay as a pair, it is strongly recommended to have no fewer than 3 koi at a time. Koi are very communal fish and can often act depressed if they are kept solo.
- ◆ **You can keep koi with goldfish**
They share all the same bacteria and parasites, so you can absolutely keep them together. Goldfish can carry some koi viruses without showing any clinical signs, but so can asymptomatic koi.

Care & Maintenance

Maintenance Guide

No fish, including koi, are “maintenance free” pets. All fish ponds require just as much care as a cat or a dog! Learn all about koi care and maintenance in our online Koi Health Seminar series.

Learn more here: <http://bit.ly/koi2021>



Pond Care Checklist

Here are the tasks you need to complete on a daily, weekly, monthly, seasonally and yearly basis!

Daily

- Remove excess food and debris from skimmer
- Monitor water level and top off if necessary
- Evaluate fish swimming behavior and appetite (make note if anything seems different)
- Check water temperature

Weekly

- 10% water change using backwash operation (OR vacuum)
- **Please note: this is only a general guideline. Cleaning frequency and volume will be determined by bioload, size of pond and filtration capability.**
- Perform water quality testing if new fish or equipment have been added within last 2 months
- Remove dead leaves from any live plants

Monthly

- Perform water quality testing if NO new fish or equipment have been added within last 2 mo
- Move substrate around with long pole or rake
- Shake biological filtration or rinse gently in reserved pond water

Seasonally (twice a year)

- Pond deep cleaning to remove excess algae and debris
- **If your pond has not be thoroughly cleaned in more than 1 year, it is recommended your fish be removed and placed in a temporary tub prior to cleaning.**
- Check water bill and see if any increases could point out pond leaks

Yearly

- Change UV bulb
- Buy new water test kit

Having trouble remembering to do your maintenance?

—> **Put it on your calendar!**

—> **Hire someone!**

—> **Maintenance is NOT optional!**

Feeding

Koi Nutrition

Here are a few key points to selecting the koi food that is best for you:

- ◆ Koi are omnivores, eating a mix of animal and plant proteins.
- ◆ Look for a protein content of around 32-35% and low fat around 5%.
- ◆ Pond water temperature will dictate how hungry your fish are.
- ◆ Replace your fish's food every 6 months, or buy a smaller bag.
- ◆ Do NOT store your koi food outside! Store indoors in a sealed container.

Our Favorite Koi Food



UltraBalance Maintenance or Growth Formula
Made in California with direction from a nutritionist!



How Often to Feed

Feeding your koi will depend on your water temperature:
<55F/13C —> every few days
55-70F/13-21C —> once a day
>70F/21C —> twice a day

How Much to Feed

Since koi appetite varies, we recommend starting with a light sprinkle and allow them to eat every bite. Then sprinkle a little more. Continue for 3-5 minutes or until your fish are no longer interested in food.



High carbohydrate snacks, like Cheerios and fruit, can be fed once a week in the summer. Koi do not process carbohydrates well and excess can lead to liver disease.

Common Diseases

Signs of Disease

Many signs of disease in koi are general signs and require further investigation. These clinical signs include:

- | | |
|----------------------|---------------------|
| ◆ Decreased appetite | ◆ Clamped fins |
| ◆ Increased lethargy | ◆ Fungal growth |
| ◆ Fin tears/rips | ◆ Sitting on bottom |

If you see any of these signs—check your water chemistry!

****Don't use test strips! Use liquid-based kit!****

Ranges available here:

<https://cafishvet.com/water-quality/water-quality-ranges/>

Water chemistry bad? —> Water change

Water chemistry good? —> Call your vet

To find a fish veterinarian near you, visit:

American Association of Fish Veterinarians

<https://FISHVETS.org>

World Aquatic Veterinary Medical Association

<https://WAVMA.org>

Is my koi egg bound?

If koi don't have the urge to spawn, females will resorb the eggs. This is a normal and not life-threatening process. Females often have undiagnosed reproductive tumors that may be confused with "egg binding." These fish require surgery.

Can I put plants in my koi pond?

You can absolutely put plants in your koi pond, provided you quarantine them properly. Some koi like to nibble on plants, especially bugs and larvae that use the plants as a home. Your koi may destroy your plants, or they may not.

Koi Herpes Virus (KHV)

Koi herpesvirus is a serious disease in koi internationally. Clinical signs include sunken eyes, increased mucus coat and sudden death. Testing is available.