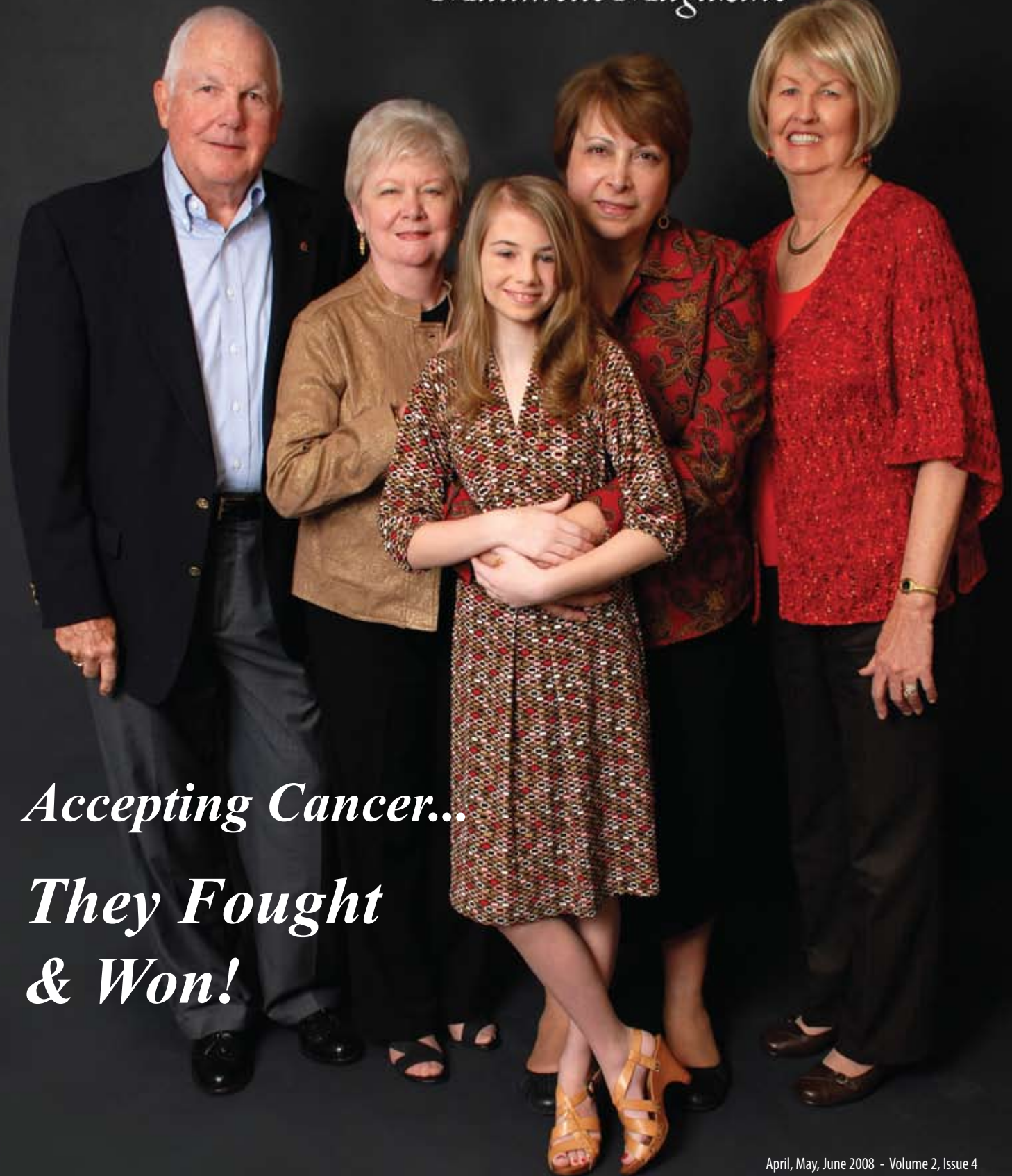




# Maumelle Magazine

*Maumelle Magazine*



*Accepting Cancer...*  
*They Fought*  
*& Won!*

# The Art of Successful Aquariums



By Shannon Goins

tank is new or after water change can help this process along. Just remember that no matter how good your filter may be, no filter is good enough to replace regular monthly water changes.

## 2. Test Water Regularly

It is important to monitor aquarium water on a regular basis to make sure that living conditions are acceptable for your fish. Testing once a week is usually sufficient. Be sure to invest in good quality test kits that measure ammonia, nitrite, nitrate, and pH. If you have a saltwater tank, you also will want to get a hydrometer or refractometer to measure salinity. Your local fish store staff will be able to help you identify acceptable levels for each of these tests. Additionally, they can advise you regarding correct supplements, like pH buffer, that can help correct bad water parameters.

## 3. Keep Feeding to a Minimum

One common myth about fish is that they must be fed multiple times a day, or until they are full. Fish do much better when fed a small amount of food every other day because it reduces the amount of waste introduced into the aquarium. Remember: Just because your fish look hungry does not mean they really are. Fish have conditioned behavior to beg for food when people walk past the tank. Resist the urge to over-feed – set days of the week to feed and stick to them.

## 4. Stock Your Tank Slowly

The day you buy your tank is not the best day to buy fish because the environment in your new aquarium is too sterile and the temperature is not yet regulated. To make the tank less sterile and more like an active ecosystem, establish a colony of beneficial bacteria by using an additive such as BioSpira or StressZyme.

Fish produce waste in the form of ammonia which is very toxic and must be processed by bacteria into a less toxic form known as nitrate. Until your beneficial bacteria have produced a large enough colony to rapidly process the toxic ammonia into less toxic nitrates, your fish will endure some stress. Adding extra doses of bacteria once a week can help this process along.

About a week after setting up your aquarium, add a couple of very hardy fish and then feed them sparingly for a month. Uneaten food is also a source of ammonia, so the less food you add, the better. Keep a close eye on your ammonia levels. If after the first month the ammonia level is zero, then you are safe to add a couple more fish.



## 5. Get Fish Appropriate for Your Aquarium

Contrary to popular belief, the size of the tank will not stunt the growth of a fish. Therefore, the size of your tank should determine the size of the fish you buy. If you have a small tank, choose small fish. If you have a larger tank, larger fish may be an option. However, be aware that some small commonly sold fish have very large tank requirements. A 2" Oscar fish can grow easily to over 12" in captivity and needs over 100 gallons of water with substantial filtration to be healthy.

Another matter to take into consideration when buying fish is that not all fish are compatible with one another. For example, Cichlids, a popular larger breed of freshwater fish, do not do well with commu-



Having a successful aquarium is not a difficult task when you are equipped with good information. Many of us have gone to a retail store, bought a new aquarium, some pretty gravel, decorations and fish, only to have them die a short time later. With a little basic know-how, this need not happen and your new aquarium need not end up in your next garage sale.

Key Factors in Having a Successful Aquarium

## 1. Get a Good Filter

Having a good filter is one of the most important aspects of having a healthy aquarium. Good filters provide lots of surface area for beneficial bacteria to grow. These bacteria process and make safe the dangerous by-products of fish waste and residual food that otherwise lead to untimely fish deaths. Adding bacterial supplements when the

nity fish. Likewise, saltwater predator fish such as lionfish, triggers, and puffers do not make good tank mates for small reef fish such as gobies and blennies. If you are unsure, ask your local fish store for assistance.

## 6. Perform Monthly Water Changes

To keep the aquarium environment clean and healthy, you must change part of your aquarium water once a month. Generally about 30% of the tank volume is sufficient, but that is not always enough. To figure out how big of a water change you need to do, use your test kit to determine how high your nitrate levels are. Nitrate levels should remain under 40

Nitrate levels climb over time because they are the end product of the



Nitrogen Cycle which is constantly happening in your aquarium. The Nitrogen Cycle is started by fish waste and excess food that produce ammonia as they decay. Ammonia is converted into Nitrite and then further into Nitrate by the beneficial bacteria that live in your filter. Nitrate is normally present, but is toxic at higher



levels. The only way to reduce Nitrate levels is to change part of the water. The new water that is added back into the aquarium is effectively Nitrate free and dilutes the Nitrates that exist in the aquarium water that was not removed.

## 7. Use the Correct Type of Water

Different aquariums require different levels of water filtration. Saltwater

aquariums require the purest form of filtered water known as Reverse Osmosis / De-ionized (RO/DI) water. RO/DI water is almost 100% devoid of all organic and inorganic material. This is important for saltwater aquariums because many pollutants found in tap water bind to coral growth receptor sites, stunting growth. Additionally, trace nitrates and phosphates contribute significantly to algae growth. To obtain RO/DI water, you can purchase your own RO/DI filter or buy pre-filtered water at your local aquarium store. Some stores sell RO/DI water pre-mixed with salt ready to go into your tank

On the other hand, freshwater aquariums do fine with de-chlorinated tap water. Planted aquariums actually do best with tap water because the pesky nitrates and phosphates that cause so much trouble in saltwater aquariums act as fertilizer for plants.

## 8. Have the Correct Light

Most lights that come as part of a tank package are standard output fluorescent bulbs similar to what are found in overhead lighting fixtures. These lights are fine for freshwater or saltwater fish only tanks; however, they are not strong enough to support corals or freshwater plants. Stronger lights such as metal halides, compact fluorescent, or VHO (very high output) fluorescent bulbs are needed to support these light-dependent aquarium creatures. One may also choose a brighter light simply to make the tank

appear brighter and more vibrant.

## 9. Invest in a Reliable Heater

Most fish in the aquarium trade are tropical in nature and require water that remains consistently warm. Minor fluctuations in temperature can lead to stress and provide the opportunity for an outbreak of Ich (Ichthyophthirius multifiliis), a common disease of marine and freshwater fish. Keeping fish at the correct temperature with a good quality heater will lessen headaches associated with your aquarium.

Normally, tropical freshwater fish are kept between 78-79 degrees Fahrenheit; however, there are some exceptions so be sure to ask your local fish store staff if you are unsure. Saltwater fish and coral require a slightly higher temperature, around 80 degrees Fahrenheit

Setting up an aquarium is a process, and having a little patience will bring a great deal of success. A little work goes a long way toward producing something unique. If you still have questions about your aquarium, stop in at your local fish store and talk to knowledgeable staff about getting set up with the right equipment. They also can help you with fish compatibility questions. Some fish stores will even test your water for free if you bring in a sample. ❀



Shannon Goins is a co-owner of North-Side Aquatics located on Counts Massie Rd. in Maumelle. She is also a technology consultant, specializing in legal and medical practice management.