



## Newsletter for the south Florida canal and urban pond angler

*Our Purpose: To identify excellent south Florida freshwater fishing opportunities and to provide urban anglers with relevant information that will enhance the quality of their outdoor experience.*

### Featured fish: Spotted sunfish ("Stumpknocker")



**Size:** This diminutive sunfish is our smallest local sportfish, reaching only about 8 inches in length. A 6-inch catch qualifies as a "big one." The state record tips the scales at 0.83 pounds (a little over 13 ounces). The **Big Catch** minimum is 8 inches or 0.5 pounds for adults, and 6 inches or 0.4 pounds for youth ([MyFWC.com/fishing/freshwater/fishing-tips/angler-recognition/](http://MyFWC.com/fishing/freshwater/fishing-tips/angler-recognition/)).

**Identification:** This fish is relatively nondescript, but is "chunkier" or plumper than other sunfish.

As the name suggests, its most characteristic feature is the even rows of small spots along the side. These spots are usually black, but may be red. In general coloration, the fish ranges from olive to brown.

**Similar species:** It is almost easier to identify this fish by ruling out what it isn't. The spotted sunfish lacks the vertical bars of the bluegill or spotted tilapia, the red operculum border of the redear sunfish, and the large mouth and facial lines of the warmouth. The even rows of spots remain the best way to differentiate this species from all others.

**Angling qualities:** The spotted sunfish is usually caught incidentally by anglers targeting its larger relatives, the bluegill and redear sunfish. However, this small but sporty fish is deliberately sought after by north Florida stream anglers. The spotted sunfish is locally called a "stumpknocker" because of its affinity for submerged timber. Very aggressive in defending its bed during the spawning season, the spotted will take most small lures and baits. Its small size makes it ideal for ultralight spinning tackle or flyrod; when using the latter, the author has found this fish to be particularly susceptible to tiny nymphs. Wet flies also work well. Good spinning lures include tiny spinners, jigs, and beetle spins. Excellent baits include grass shrimp, live worms, and crickets—standard bream fare. While quite edible, most anglers will likely



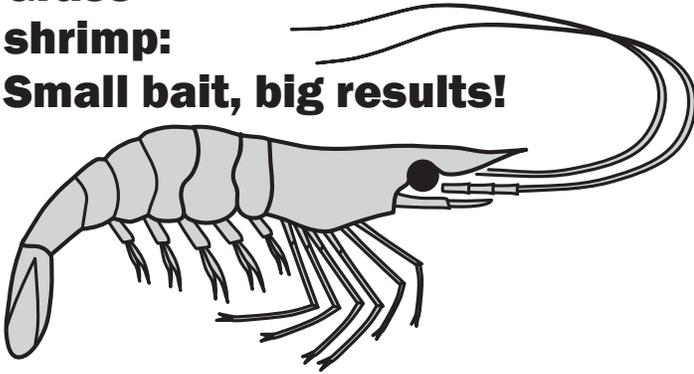
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deem only the lunkers of this species to be large enough for the fillet knife. Like most sunfish, the spotted fights well for its size—but only ultralight or fly gear is light enough to bring out the sport in this fish.

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## Grass shrimp: Small bait, big results!



If you fish for bream and haven't tried grass shrimp yet, then you need to know: You're missing out! Freshwater grass shrimp are an excellent bait for all species of bream, come free, are usually easy to collect, and (since they're not available in bait shops) can give you an advantage over "the next guy."

Grass shrimp are known to scientific folk as *Palaemonetes*, but are also commonly called **ghost shrimp** or **glass shrimp** because they are semitransparent. There are a variety of species, which are usually found in lakes or slow-moving streams. As the name implies, grass shrimp are often associated with vegetation. Freshwater grass shrimp may occasionally be found in brackish water, but generally stay in (and will only reproduce in) fresh water. Sexes are separate, with distinct males and females; the latter can be easily identified when carrying eggs under the abdomen. Their life span is only about one year, and their abundance in any particular water body may vary seasonally. They can reach a size of about two inches, but average closer to an inch or inch-and-a-half in length (the illustration above is approximately two times life size). The grass shrimp's diet consists mainly of algae and plant matter.

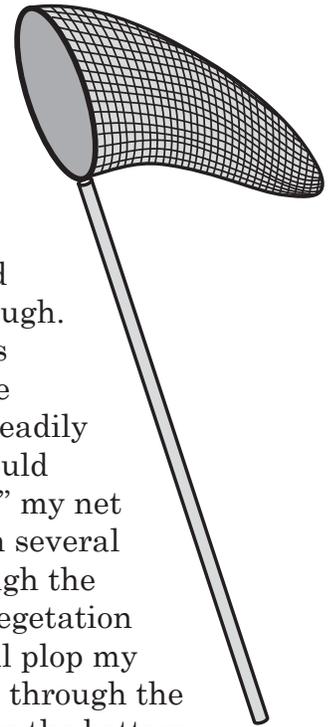
But all you need to know as an angler is that grass shrimp catch fish. Although used primarily as a bream bait, few Florida fish will turn their nose up at a grass shrimp. While

fishing for sunfish, I've routinely had passing bass up to a couple pounds in size take my grass shrimp offering as well.

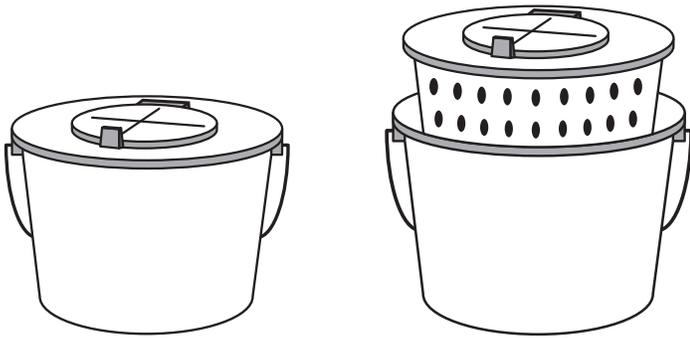
So how do you get this great bait? In most lakes, it's fairly easy. You'll need a sturdy-framed, long-handled dipnet with a mesh size of 1/4" to 1/16". A larger mesh will let shrimp escape, while a finer mesh will become clogged with vegetation and silt and not drain well. Any kind of reinforcement of the net bag around the frame is a major plus, because this net will really be "beating the bushes". Bait and tackle shops sell a variety of nets that will work, but if you have trouble finding an ideal net, this certainly won't prevent you from catching shrimp. As long as the mesh size is about right, it should work at least moderately well.

Next, you'll need a lake or canal with at least some vegetation in it. I've found that even a mostly bare lake can still produce a morning's bait if I can locate even a small patch of submerged weeds to run my net through. Emergent shoreline grass is ideal, but any shoreline vegetation that you can readily run your net through should produce results. I'll "beat" my net through the vegetation in several consecutive sweeps through the same spot, pushing the vegetation down as I sweep. Then I'll plop my net on the grass and pick through the vegetation accumulated in the bottom of the net bag for my tiny quarry.

You'll soon learn why grass shrimp are also called glass or ghost shrimp—their translucent bodies can be hard to spot amid the weeds and other lake debris accumulated in the bottom of your dipnet. And once you spot them, the challenge isn't over: they will usually be jumping, with a powerful flick of the tail, and you have to be fast to grab them! I've found it helpful to expose the contents of the net bag a little at a time, in order to minimize shrimp jumping out of the



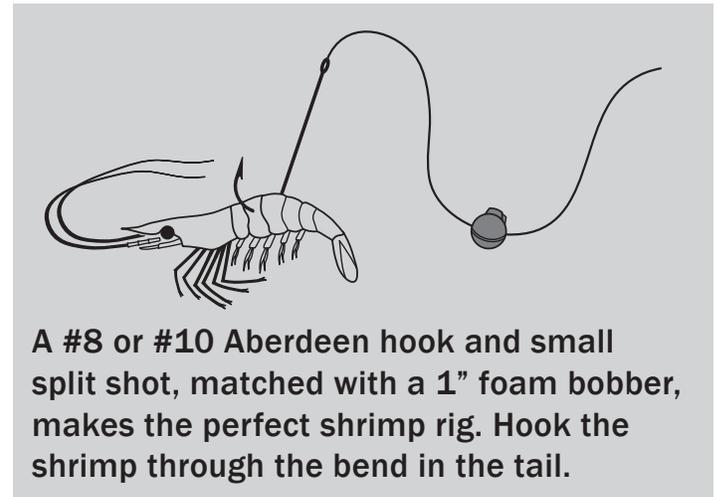
net faster than I can grab them. When I'm done, the remaining plant debris goes back in the water—not on shore to leave a mess! It usually takes me less than half an hour to round up enough shrimp for a morning's fishing. Most lakes, ponds, and canals will harbor grass shrimp, though I have fished a few where they seemed pretty scarce. I've also noticed cyclical patterns on the waters I fish, with the shrimp being less common or smaller at some times than at others. However, it's pretty rare that I get completely "skunked" as far as catching this bait goes.



**Standard or ventilated “minnow buckets” work great for keeping grass shrimp.**

The shrimp go into a standard small bait bucket or “minnow bucket” with latching lid, available at most bait and tackle shops. Two versions of these plastic buckets are available, one just the standard bucket and the other a ventilated bucket that rests inside a larger bucket. The ventilated bucket design makes water changes easy—just pull it out of the main bucket, let the water drain, and then submerge it in the lake to refill it before placing it back in the main bucket. You can also leave such a bucket in the water, but some of the grass shrimp you catch will be small enough to work their way out of the holes—ditto for draining the bucket if the day's catch of shrimp is running small. Grass shrimp are a hardy bait, and only an occasional water change is needed to keep them healthy. Their oxygen requirements are low, but if the water gets too warm the shrimp will start dying. However, if kept cool enough (inside a cooler over ice), these shrimp can actually survive for some time placed in layers of wet newspapers, as I've seen other anglers occasionally doing.

Because of both the small size of a sunfish's mouth and the diminutive size of my bait, I use a #8 or #10 Aberdeen hook when fishing shrimp for sunfish. I hook the bait through the bend in the tail. My bobber is equally small; it takes almost no flotation at all to suspend a grass shrimp. I've found one-inch, cylindrical foam bobbers work well. These also put up little resistance when a wary sunfish takes the bait; it will be more likely to hang onto the shrimp rather than dropping it. I'll usually position the bobber about three feet above the hook for starters, but adjust for a deeper presentation if I don't get any bites pretty quickly. I use a tiny split shot (and again, it doesn't take much) to sink my shrimp to the desired depth. Part of the reason I use a split shot is that it keeps most of my line to the shrimp taught, notifying me immediately if I have a bite. Usually, your bobber will simply disappear—do set the hook quickly to avoid gut hooking, because most fish will really gulp these shrimp down. Another time to set the hook and start reeling is if your bobber just starts sliding across the water surface without being pulled under: something has grabbed your shrimp and is heading for home.

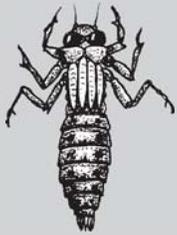


**A #8 or #10 Aberdeen hook and small split shot, matched with a 1" foam bobber, makes the perfect shrimp rig. Hook the shrimp through the bend in the tail.**

Of course, grass shrimp can also be fished on the bottom—where the bigger bluegill and redear sunfish often congregate. (A general rule when going after bream is to fish deeper if all you are catching are small ones.) Use only enough weight to cast your bait where you want to place it, and keep it there. For me with my ultralight spinning gear, that's usually just a couple of split shot or, at most, a 1/8 ounce

egg sinker set a foot or so ahead of the bait. Heavier gear may require a bit more weight. Set the hook as soon as you feel a bite—fish will swallow grass shrimp without hesitation, so there's no need to delay when the strike comes. This will help minimize deeply hooked fish.

So there you have it. Grass shrimp may not always work better than live worms or crickets, but they do nearly always work at *least* as well. And they're as fun to catch as they are to fish—give them a try!



You'll come across many other interesting aquatic creatures while dipnetting grass shrimp. Check the last two pages of this issue for an aquatic invertebrate identifier!

## Interview: John Cassady



### **FWC Manatee Research Associate and Monofilament Recovery & Recycling Program Coordinator**

**The City Fisher:** How did you come to work for FWC's Florida Manatee Program?

**John Cassady:** I was born in Louisville, Kentucky and moved to a small farm in Southern Illinois when I was 11 years old. My

father moved to Palm Beach County when I was 8 and I spent my summers here boating, swimming, fishing and diving. I started with the FWC in 2004 as the Coordinator of the Monofilament Recovery and Recycling Program within FWC's Marine Mammal Section at the Fish and Wildlife Research Institute (FWRI). Currently, I am a Research Associate in the Marine Mammal Section and focus on collecting reported manatee carcasses for cause-of-death determination, conducting manatee rescues, and contributing to other research and monitoring projects. I never set out or planned on working with manatees, but now I can't imagine doing anything else.

**CF:** What are the goals of the Manatee Program?

**JC:** The goal of the research program is to provide wildlife managers with detailed scientific information about manatees to help make informed decisions that will benefit manatee conservation and protection. Biologists in our program help address species recovery planning through effective research, monitoring and rescuing injured or sick manatees.

**CF:** And what are the objectives of the Monofilament Recovery and Recycling Program (MRRP), and its relation to your manatee work?

**JC:** The goal of the MRRP is the elimination of discarded monofilament fishing line in the environment thereby eliminating the injuries it causes to our wildlife—including and especially manatees. This is accomplished through education, collection and recycling.

**CF:** What are some of the types of animals injured by monofilament?

**JC:** There are many different species that are injured or killed by discarded monofilament fishing line. Along the coast we see manatees, sea turtles, whales, dolphins, and rays entangled in line. Birds probably make up the largest number, with pelicans, herons, egrets and sea gulls being the most commonly affected. Raccoons, opossums, skunks and squirrels have been injured by monofilament as well. Wildlife, domestic animals and even

people can become victims of entanglement. For example, a family dog became entangled and had to be taken to the vet. Divers can become entangled in discarded line and I know that boaters can have the frustrating misfortune of getting monofilament wrapped around a propeller.



**An unfortunate osprey (or “fish hawk”) entangled in netting and fishing line.**

**CF:** How does the MRPP work?

**JC:** The first step is to identify key areas where collection bins should be placed. This could be anywhere that fishing and/or boating is taking place or anywhere that fishing tackle is sold. We have both outdoor bins and indoor displays for collecting the line. In the case of an outdoor bin, a program volunteer will be assigned to maintain the bin and collect the line. The bins are usually checked once a month, but that may vary depending on the amount of line collected. The line then has to be cleaned of any foreign material and the monofilament is boxed and sent to Berkley (a division of Pure Fishing, [www.purefishing.com](http://www.purefishing.com)) for recycling. The line is melted down and made into what is known as a Fish-Hab, which is put into the water as an artificial fish habitat.

**CF:** And what is your role in the program?

**JC:** Well, I am still FWC’s Coordinator for the program in Florida. I oversee the distribution of bins, stickers, brochures and other materials to interested groups, often from around the

country (and occasionally outside the country!) But since the funding no longer exists and I have assumed my new role in the Manatee Program, I have to rely much more on the County Coordinators, volunteers and interns for the day-to-day operation of the program. The original funding for the Coordinator position came from a grant, which was not renewed. Now the program exists on donations.

**CF:** How many monofilament recycling bins does the program have in Florida?

**JC:** Several hundred at least. There are over 70 bins in Palm Beach County alone.

**CF:** About how much mono has been recycled by the program?

**JC:** We do not collect specific information on how much monofilament has been collected. However, bins in popular fishing areas often are totally filled when they are checked (usually monthly but sometimes even more frequently, depending on the location). Being an all-volunteer organization, we do not have the ability to spend a lot of time on the collection of those data. So, the best I can say is, it is a lot of line!



**A Berkley “Fish Hab,” the eco-friendly end product of recycled monofilament.**

**CF:** It sounds like a big program – what other cooperators provide assistance?

**JC:** There are a lot of organizations that participate in the program in various ways, from helping coordinate the program to maintaining bins. In addition to FWC, U.S. Fish and Wildlife Service, Florida

Department of Environmental Protection, Sea Grant Florida, National Oceanic and Atmospheric Administration, Mote Marine Lab, Dolphin Research Center, Volusia County Environmental Management, Palm Beach County Environmental Resource Management and Jupiter Environmental Research and Field Studies Academy to just name a few of many, all contribute to the program. Of course, the program would not be possible if it was not for Berkley (Pure Fishing) for providing the recycling facility, indoor collection displays and all the shipping materials and costs.



**A familiar and welcome sight on many Florida waters: a monofilament recycling bin.**

**CF:** How many volunteers are helping with the current program and what are their responsibilities?

**JC:** I am not sure how many volunteers the Program has across the state; each county coordinator keeps track of their own volunteers. We have over 30 regular Program volunteers in Palm Beach County alone and many more groups (Scout Troops, high school classes) that help on occasion with special events or activities. Their responsibilities can be as small as attending a bin-building session

or as large as acting as County Coordinator. It all depends on the amount of time the volunteer has available.

**CF:** What does someone need to do if they are interested in volunteering and what is the usual time commitment required?

**JC:** They can either contact me directly or go through the MRRP web site ([www.fishinglinerecycling.org](http://www.fishinglinerecycling.org)). The time commitment depends on the individual's availability—from checking a bin once a month to being a county coordinator. So, it is really up to the volunteer.

**CF:** What about adding their local fishing hole to the MRRP?

**JC:** If anyone has a location in mind they can contact me or go through the web site. The location will have to be approved and a volunteer will have to be assigned to monitor and maintain the bin. So, if they are willing to be the volunteer, it will be that much easier!

**CF:** Finally, how effective has the program been in Florida?

**JC:** Our program here in Florida has been a huge success. We have become a model that has been used to get many other programs started across the country and even the world. The MRRP web site is visited by many people and provides other programs needed supplies (at a reduced cost) and helpful information on how to start and maintain a monofilament program. The program has grown so quickly here in Florida it is hard to keep our database up to date with all the new locations. I am very proud to be a part of such a successful program and to have worked with so many dedicated people. Having seen the terrible things that carelessly discarded monofilament can do to the environment and to animals, it is a good feeling to know we are doing something to protect them from harm.

If you are interested in becoming involved with the Monofilament Recovery and Recycling Program (MRRP), check [www.fishinglinerecycling.org](http://www.fishinglinerecycling.org) or contact John Cassady at [John.Cassady@myfwc.com](mailto:John.Cassady@myfwc.com) or (561) 575-5408 Ext. 12.

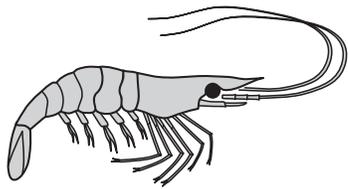
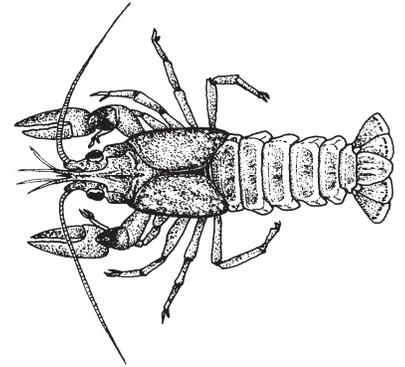
## Creatures of the net

Even if you happen to be a dry fly purist today, chances are you got your start in fishing with a small aberdeen hook on the end of the line in one hand, and a dipnet in the other. Collecting your own bait is a great way to start down the angler's path, but there are plenty of other interesting aquatic creatures swimming our ponds and canals, too. This article is for anyone who has ever held a dipnet, wondered what in the world that little thing with all the legs was, and discovered that catching bait can be just as much fun as catching fish.

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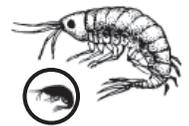
### Crustaceans

**Crayfish:** (To 5") Color ranges from red to brown to green. This common crustacean is well-known as a good bait for largemouth bass. The pincers can draw blood, however, so handle with care when using "crawdads" for bait. The egg-bearing female can be told instantly because she anchors the small, black eggs beneath her tail. Crayfish have nineteen pairs of appendages including antennae, legs, claws, and swimmerets! **Note:** There are no seasons, gear, bag or size limits for freshwater crayfish and neither a recreational nor commercial license is needed. It is illegal to take Florida's imperiled crayfish (Panama City, Sims Sink and Black Creek crayfishes) and all cave-inhabiting crayfish.



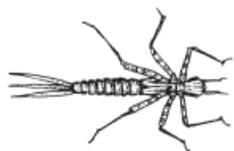
**Grass shrimp:** (To 1 ½") This greenish, semi-transparent crustacean is very common. It is usually found closely associated with vegetation of some kind, often shoreline grasses. Like the crayfish, a female anchors her eggs beneath her tail. This is a prime panfish bait that, despite its small size, may also draw the interest of passing largemouths.

**Amphipod:** (Less than ¼") This gray, near-microscopic crustacean is common in bottom sediments and some vegetation (especially the submerged roots of water lettuce and water hyacinth). When removed from the water, it jumps around erratically.



### Insects

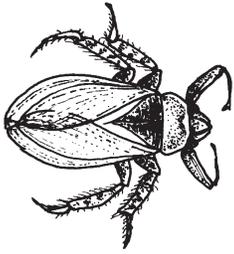
Many insects have a life cycle that involves water. A common pattern is to have a larval stage that lives in water, and an "emergent" adult stage that lives on land (although often still near water). For some insects the larval stage is the long-lived stage while the adult may live for only days or even hours. Other insects, such as predaceous diving beetles, may live out their entire lives under water, as both larval and adult stages.



**Damselfly nymph:** (To 1") Usually green or brown. Look for the three feathery "tails", which are actually breathing structures similar to gills. This is the larval form of the adult damselfly.

**Dragonfly nymph:** (To 1 ½") This insect is usually green or brown in color. The larval form (like the adult dragonfly) is predaceous and will bite if given the opportunity. The body is thicker and rounder than the damselfly's (above) and lacks the three "tails". Dragonfly nymphs can actually use a form of jet propulsion by expelling water quickly from the back of the body to "jet" forward if alarmed.





**Water bug:** (To 2 ½”) This diverse group of insects comes in a wide variety of shapes and sizes. They are usually green, brown, or black. Most are highly predatory. The small, bright green water bugs in particular (called “alligator fleas” locally) have a strong, stinging bite—if one gets you, you’ll definitely take notice! Males of some species may be found carrying eggs cemented to their backs (for protection) by the female.

**Water strider:** (To ¾”) This small, delicate bug is found *on* the water rather than in it. It usually occurs in groups that stay closely together as they skate erratically across the water’s surface. Usually black or brown in color.



**Water boatman:** (To ½”) This insect’s name comes from the oar-shaped back legs. A small dark gray bug that spends all its time underwater near pond or lake bottom. Unusual among other aquatic bugs in being non-predatory, feeding instead on plants or algae.

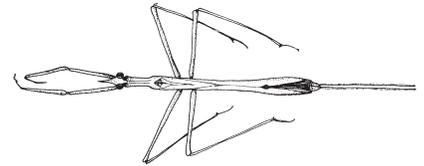
**Whirligig beetle:** (To 1”) This shiny black beetle skims rapidly on top of the water’s surface in tight circles, lending it its name. It is often found in groups, and the overall effect on the observer can be dizzying!



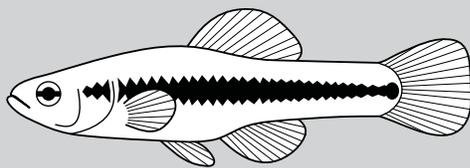
**Predaceous diving beetle:** (To 1”) The larvae are called “water tigers,” for their aggressiveness and voracious appetite. Most adults are black or brown, and may have hairs on the back of their legs that increase surface area for swimming, giving them “diving fins” for better propulsion and maneuverability. Adults must breathe air directly, and can carry a bubble under their shells as a natural scuba tank!



**Water scorpion:** (To 2”) Don’t worry—this brown insect is not related to scorpions, despite the name! It is predatory, however, and hangs from vegetation near the surface while it waits for prey to come within reach. Looks very similar to a small walking stick.



**Crawling water beetle:** (To ¼”) These tiny beetles are variously colored but usually have dark spots on the back. Poor swimmers that prefer to crawl, they are omnivorous and feed on a variety of plant and animal matter.



(Bluefin killifish)

Minnows and baitfish were covered in Issue 38, which is available online along with other recent back issues at:

[myfwc.com/news/resources/columns/city-fisher/](http://myfwc.com/news/resources/columns/city-fisher/)

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