

# Lagniappe



EXTENSION PROGRAMS  
Agriculture and Forestry  
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Environmental Sciences  
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Natural Resources

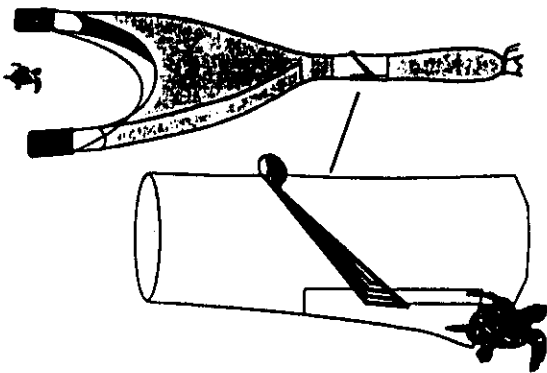
September 4, 2001

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## TRUTH, JUSTICE AND T.E.D.S

It seems hard to believe that the bitter battles over the mandatory use of TEDs in shrimp trawls took place over ten years ago. The debate, which shrimpers ended up losing, still festers in the minds of many shrimpers, with a deep distrust in both government and "environmentalists", in general.

While the debate raged, it was mostly based on biology and economics. Now it has become the interest of sociologists, scientists who study the development, structure, interaction, and behavior of organized groups of human beings. Two Louisiana sociologists Anthony Margavio and Shirley Laska produced a detailed analysis of the issue, its players and the result.



According to the researchers, what made the issue so powerful was that both sides, the environmentalists and the shrimpers, believed that the science would show the "truth" as they saw it. Environmental organizations raised concerns about low populations of sea turtles in the early 1970s. During that period, according to Margavio and Laska, "...incidental kills in shrimp trawls were listed at the bottom of a fairly long list that included beach development, rig removal pollution and the like" in NMFS reports. "By the late 1980s reports generally listed shrimp trawls at the top." Environmental organizations, chiefly the Center for Marine Conservation, refused to accept any science that restricted TED use only to certain times of year and areas of high sea turtle abundance.

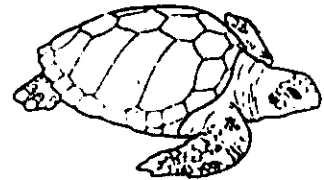
Shrimpers believed that science would show that trawling did not endanger sea turtles and that TEDs did lose shrimp. They voluntarily allowed observers on their vessels during trawling for turtle identification and counts.



To the shrimpers' surprise, NMFS estimated that they killed 40,000 sea turtles per year. Shrimpers challenged that number and obtained Congressional support for a National Academy of Sciences study. The Academy's study concluded that shrimpers killed an even larger number of turtles than the NMFS estimate. Another study did find that TEDs lost significant amounts of shrimp, however. The sociologists noted that "The Center for Marine Conservation worked very hard on the turtle cause, including cultivating close ties with the academy on its study of turtle mortality."

The authors noted that on many issues, science is confused with policy, and that social judgements became as important as facts in coming to a decision. Changing the public image of shrimpers was a well thought out strategy. By the late 1980s, the vision of shrimpers as marine harvesters being one of the last strongholds of traditional America, had been changed in the view of many to "greedy outlaws" of the high seas.

They noted that the public relations campaign by environmental organizations to redefine shrimping in relation to sea turtles did not accurately describe what happened. "Demonization and criminalization are perhaps more appropriate" they said. Margavio and Laska noted that "When confronted with these attacks, shrimpers more often than not simply got mad and cursed their accusers. All of which simply confirmed in the minds of the public the image the shrimpers' accusers desired."



Anti-TED feelings were particularly strong in Louisiana, under the leadership of Tee John Mialjevich of the Concerned Shrimpers of America. According to Margavio and Laska, one government official complained "We had the shrimpers ready to accept TEDs until Tee John and his Louisiana gang stirred them up." The two sociologists were not surprised at the reaction from Louisiana shrimpers. They noted that in Louisiana, shrimping was very closely tied to local culture. Shrimping is what most coastal residents did.

Unique to Louisiana was the family nature of shrimping with relatives on the boat. Children quit school early to follow in their fathers' footsteps as shrimpers themselves. The offshore oil industry affected shrimping. Earnings from easy-to-get oilfield work was used to buy boats. Some shrimpers worked in the oilfield between shrimp seasons. During the oil bust of the 1980s many unemployed oilfield workers returned to shrimping to support their families. Additionally, many coastal residents who didn't shrimp for sale, trawled for shrimp for their personal use. Shrimping was deeply tied to the local culture and economy.

Alone amongst state governments, the state of Louisiana mobilized to resist TEDs. The Louisiana Legislature passed an anti-TED enforcement law for state waters. The Louisiana Attorney General filed suit to block TED use in federal waters. All the while, the

Concerned Shrimpers of America was mounting political and legal counter-challenges to TED regulations. Shrimpers were successful in getting several delays of mandatory TED regulations, but with time they began to run out of legal options. Their situation, as they saw it, was desperate. They viewed TEDs as a threat to their way of life.

The result was the blockade of the Houston Ship Channel and other waterways. Vessels converged on the port from all directions in the gulf. For 36 hours, shrimp vessels tied up the most important oil depot in the United States. Three or four vessels deep, they anchored side by side. Hundreds of smaller vessels that were unable to participate in the blockade came to add their moral support. Against water cannons from the Coast Guard and tidal changes, the shrimpers held their formation. Some guardsmen cut anchor lines, and the vessels were set adrift dangerously in the stiff current. The untethered vessels resumed their positions in the formation. What started out as a plan to show solidarity by parading vessels along some busy channels turned into an illegal blockade.

After the blockade, the press coverage on the shrimpers' effort was negative. By the spring of 1990, the Coast Guard claimed that compliance with TED rules was at 90%. Yet some shrimpers still refused to use TEDs and were willing to pay the civil fine. In response, for the first time in fisheries regulation history, NMFS made violations of TED rules a criminal offense. Gear, catch and vessels could be confiscated. Compliance with TED rules moved to where it is today, very high.

Margavio and Laska did note that the lead spokesman for the Center for Marine Conservation was given a job at the national office of NMFS after the worst part of the TED battle was over. Shrimpers were not able to escape government regulation nor turn the tide of public opinion in their favor. They noted that, in the process of the debate, the whole shrimp industry was pushed away from the center and more toward the edges of the American economy.

Source: *Defining Deviance Upward: The Shrimpers' Conflict Over TEDs Regulations*. A.V. Margavio and Shirley Laska. Research in the Sociology of Work, Volume 8. 1999.

## **FREEDOM TO FISH LEGISLATION**

The use of marine protected areas (MPAs) as a fisheries management tool has gained the support of a number of fisheries scientists in recent years. The creation of such areas, in which no recreational or commercial fishing is typically allowed, is also heavily supported by national environmental groups concerned with ocean and fisheries policy. The creation of MPAs has, however, alarmed many fishermen, especially recreational fishermen. Both the national Coastal Conservation Association (CCA) and the American Sportfishing Association (ASA) are strongly supporting legislation introduced into the 107<sup>th</sup> Congress by Senators John Breaux of Louisiana and Kay Bailey of Texas.

The bill (S.1314), called "The Freedom To Fish Act", outlines standards for closing areas to recreational fishermen and would establish guidelines to preserve the public's access to use fisheries resources. In a news release supporting the bill, CCA president David Cummins stated that "Time and area closures can be effective management tools when based on good scientific data, but arbitrary restriction of recreational anglers merely displaces fishing effort, increases regulatory confusion, increases user group conflicts and casts doubt on the entire fishery management process. It is a disservice to all U.S. citizens." Added Mike Nussman, ASA vice president, "Blanket marine closures take away the single most important element to sport fishing — the public's access to the water."

The issue will likely become more controversial, as scientists have built a solid case, based on what seems to be good science, supporting MPAs. The process of creating MPAs is in full swing in the south Atlantic, primarily for reef fish management, the very same species of snappers and groupers that occur in the Gulf of Mexico.

## CATFISH HABITAT

Catfish are the most important freshwater commercial fish in Louisiana. They are also a very popular recreational fish, ranking only behind black bass in popularity. Like any other fish, their numbers are directly dependent upon the quality and amount of habitat available to them.

Channel catfish, often called eel catfish in Louisiana, use a wide variety of habitats including large and small rivers, bayous, creeks, swamps, and natural and manmade lakes. Commercial fishermen have long maintained that channel catfish migrate from rivers and bayous into back-swamps when the rivers overflow their banks into these back-swamps and floodplains, typically in late winter and spring.



As humans build more levees, river water and fish are cut off from these swamps. Very little scientific work has been done that follows catfish movements and their dependence on these swamp areas. Recently however, biologists at Mississippi State University conducted just such research.

The study took place on a 21-mile stretch of the Yockanookany River, a river draining into the Pearl River. The lower section of the study area had no levees to prevent flood waters from moving into its nearby floodplain swamps. On the upper section of the study area, the river was prevented from flooding its swamps by flood control levees.

The researchers collected 40 channel catfish with hoop nets, surgically implanted radio transmitters in them, and released them where they were captured. Twelve were from the leveed section, 20 were from the unleveed section and 8 were from a back-swamp

lake formed from an old river channel. This lake was connected with the river during flood periods. The fish were tracked weekly during March-June, 1994 and November-June 1995, and also whenever other short-term overbank floods occurred.

The results indicated that channel catfish do indeed very much use flooded swamps during high water periods. During low water-flow periods all of the radio-tagged fish were in the channel of the Yockanookany River and tended to move less than a half a mile. During river flood periods, however, many catfish moved. Five of the 12 fish from the leveed section moved to the unleveed section. Seven catfish were tracked into the flooded swamps at least once and 4 catfish moved from the river channel into the lake. No catfish moved from the unleveed section of the river to the leveed section.

Catfish strongly use scent to find food, which should cause them to tend to move upstream. The researchers were surprised by the willingness of catfish to move downstream to get into the swamps. They concluded that the fish moved into the floodplains and swamps for feeding opportunities, especially on crawfish.

As more rivers are leveed for flood control purposes, catfish as well as many other fish will have less opportunity to use floodplains and backwater habitats. Fish stocks and fisheries management will be impacted by these changes.

Source: *Channel Catfish Movements in Relation to River Channel-Floodplain Connections*. J.E. Flotemersch, D.C. Jackson and J.R. Jackson. Proceedings of the 51<sup>st</sup> Annual Conference, Southeastern Association of Fish and Wildlife Agencies. 1997.

## **KEEPING FISH CAUGHT IN CRAB TRAPS IS A NO-NO**

Louisiana has a large and vigorous blue crab fishery. Virtually all of the commercial catch and a large percentage of the recreational catch is made with wire crab traps. Last year, the Louisiana Department of Wildlife and Fisheries issued 3,561 commercial and 4,303 recreational crab trap licenses. An additional 160 recreational and 25 commercial harvesters bought crab-trap-on-trotline licenses.

At their August meeting, the Louisiana Crab Task Force discussed a part of crab trap law that few people are aware of. It is illegal to keep any finfish, even for personal use, that find their way into crab traps. Occasionally, catfish, or even a flounder or sheepshead will force their way through a flue into a trap. Many people assume that since they are fully licensed, they can keep these fish for their own use.

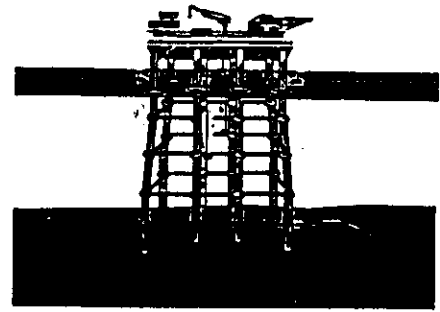
Under Louisiana law R.S. 56:8, a crab trap is defined as a device "which is used for the sole purpose of taking crabs or stone crabs." This law is further reinforced by R.S.

56:320.A(1) and R.S. 56:320.B(2) which list item by item, the types of gear which may be used to legally take finfish. Crab traps are not on either list. Both sections of the law state that finfish may be taken "by no other means" than those listed.

Simply put, this means that both commercial and recreational crab trap users must immediately release any finfish accidentally caught, regardless of any other licenses held by the crabber.

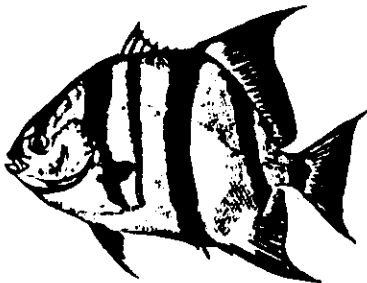
## PLATFORM REMOVAL AND FISH

Offshore fishing in Louisiana has become almost automatically associated with the 4,000 oil and gas platforms off of the state's coast. However, oil and gas platforms are not there to improve the catch of fishermen; they are in place to produce oil and gas. When the oil and gas plays out, the platforms are legally required to be removed, resulting in an increasing number being taken out each year.



Platforms are most often removed by dropping plastique explosives down their hollow legs to a point below the mudline. When set off, the explosions cut the legs, allowing the platform to be picked up and moved. These explosions do kill fish and other nearby marine animals. With the debate over red snapper's overfished status and the decreasing number of days that fishermen are allowed to fish for red snappers, some concern has been expressed over the number of fish killed by these explosions.

In an attempt to determine the impacts of rig removals on fish populations, National Marine Fisheries Service biologists monitored 9 platform removals from depths between 45 and 104 feet deep. After each set of explosions, all floating fish were picked up with small boats. Biologists then made three different surveys of the bottom to get the fish that didn't float.



Fish from 4 inches up were identified to species and weighed. Four species of fish made up 86% of all the fish picked up: Atlantic spadefish (42%), blue runner (16%), red snapper (15%), and sheephead (11%). A total of 3,390 fish were determined to have been killed at the 9 removals. There was no relation between the number of fish killed and the size of the platform.

The scientists then combined this data with other data taken from 125 other rig removals done since 1987. Overall, the average number of red snappers killed per

explosive rig removal was 515. Multiplying this times the 80 structures removed each year in the Gulf produces an estimated annual red snapper kill of 41,200 per year, the majority of which were 2 and 3 year old fish.

At first glance, this appears to be a very large number. However, when compared to the number of red snapper taken by recreational and commercial fishermen, the number of fish that die after they are released because they are undersized or the season is closed, and number killed in bycatch, the rig removal kill is almost unnoticeable in comparison. The effects on gag grouper and redfish were even smaller.

Source: *Estimation of Fisheries Impacts From Underwater Explosives Used in Offshore Oil and Gas Structure Removal*. G. R. Gitschlag, J. Powers, C. Legault, M. Schirripa, & C. Porch. Gulf of Mexico Fish and Fisheries: Bringing Together New and Recent Research. U. S. Department of the Interior, Minerals Management Service. October, 2000.

## EXOTIC OYSTER RESEARCH

Experiments with a non-native oyster species has Virginia researchers excited. This oyster, commonly known as the Suminoe oyster, and scientifically known as *Crassostrea ariakensis*, is native to the waters of China, India and Japan. In August, 2000, the Virginia researchers placed 600 Suminoe oysters and an identical number of native oysters (the same species that we have in the Gulf) on muddy bottom in each of 4 locations in Chesapeake Bay.

The researchers were amazed at how fast they grew. When the Suminoes were 3 to 4 inches long, the natives had grown only to the size of a quarter. The only negative was that the Suminoes grew so fast that they had thin shells. Of even more interest was their resistance to disease. While 50% of the natives died, only 2 Suminoes died, and those died because someone stepped on them.

At one time, the Chesapeake Bay states of Virginia and Maryland were truly the giants of U.S. oyster production. Chesapeake oyster production has declined to a tiny fraction of its historic production due to a combination of pollution, overharvest, and the oyster diseases MSX and Dermo. Much of Louisiana's oyster production is now shipped to fill those markets.

After hearing these rave reviews, the Virginia Marine Resources Commission voted unanimously to continue, and to expand the experiment, for another year. Maryland, Virginia's neighbor is reserving judgement. Early in the research, the Maryland Department of Natural Resources expressed strong opposition to any introduction of exotic oysters into the Chesapeake ecosystem.

## TEXAS HOUSEBOATS

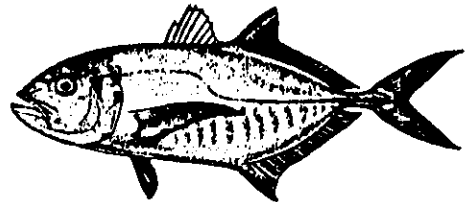
Louisiana is houseboat country. Hundreds, maybe even thousands, of them are anchored, tied up, or otherwise moored in almost all of the state's rivers, bayous and lakes, especially in south Louisiana. Commercial and recreational fishermen use them heavily. In some cases whole families live on them permanently. More are being built every day. But regulations may be coming. For example, the Louisiana Department of Health and Hospitals is now enforcing requirements that houseboats with toilets on board have approved sewage treatment systems.

What has happened in our neighboring state of Texas this year is another case in point. There, legislation went into effect that requires that all "floating cabins", as they call them, moored in coastal waters, be registered and permitted by the Texas Parks and Wildlife Department (TPW). The initial permit fee is \$1500 and the annual renewal fee is \$300. Only floating cabins moored in place before August 31, 2001 were eligible for permits. Failure to get a permit will result in TPW removing and disposing of the floating cabin and its contents.

TPW estimates that more than 100 such floating cabins are used by commercial and recreational fishermen in Texas coastal waters.

## HARDTAILS

Anyone that has fished at one of the many offshore oil and gas platforms in the Gulf has seen the thousands of blue runners, or as we commonly call them, hardtails, under and around almost every platform. Research done at LSU indicates that 10,000 to 30,000 fish may be associated with a platform and that up to 94% of them can be blue runners.



These 12 to 18 inch fish, members of the same family as amberjacks and pompano, are seldom targeted by anglers, except to catch for use as bait for larger species. Their large numbers would certainly indicate that they are important in the food web however, eating smaller organisms, and themselves serving as food for large predators such as barracudas, groupers, cobia, other jacks, and even open-water fish such as king mackerel, billfish and tunas that often visit platforms.

Very little research has been done on this common fish. Recently, however, scientists, at LSU conducted research on the diet of blue runners, in an attempt to



understand the food web associated with platforms and whether platforms actually produce more fish than open water/natural bottoms or whether they simply attract fish from those areas.

The researchers sampled blue runners from two platforms, Grand Isle 94B (GI 94B) in 208 feet of water and Main Pass 259A, (MP 259A) in 429 feet of water. GI 94B was sampled in June, July and August, 1999 and MP 259A in June, July and September, 1999. At each location, blue runners were caught with rods and reels on artificial lures and their stomachs removed and preserved. The food items were later removed, examined with a microscope, and identified.

The researchers found that blue runners, especially those under 14 inches long fed very heavily on zooplankton, rather than on the plant and animal growth on the platforms themselves. Zooplankters include tiny free-floating animals and the larvae of bigger marine life. As blue runners grew larger, fish became a higher percentage of their diet, but they never stopped eating zooplankton. Blue runners seemed to feed moderately all day under and near the platforms, but binge before daylight, between 3 a.m. and 7 a.m. The biologists' theory was that the floodlights on the platforms allowed these sight-feeding fish to see well enough to feed in darkness.

Since the zooplankton in their diets was likely carried by currents to the platforms, rather than produced by the platforms, it would be logical to assume that the platforms do not "produce" fish. However, platforms may still play an important role. Previous research has shown that ocean current speeds can be reduced by 20% or more immediately behind a platform and that the platform legs and casings can break the current enough to form eddies behind them. The reduced currents and the eddies can, to a degree, concentrate whatever the currents carry, such as zooplankton. Also some zooplankters which have weak swimming ability tend to move towards lights, which would also tend to concentrate them under lighted platforms at night.

These factors may provide blue runners with increased concentrations of food and the ability to feed around the clock. Such conditions may explain how the large numbers of blue runners and their predators can be sustained in the waters around platforms. Questions on whether platforms, and the increasingly popular artificial reefs, produce more fish to catch or whether they simply concentrate fish, making them easier to overfish are important fisheries management questions.

Source: *Zooplanktivory by Blue Runner Caranx crysos: An Energetic Subsidy to Gulf of Mexico Fish Populations at Petroleum Platforms.* Sean F. Keenan, Mark C. Benfield and Richard Shaw. Louisiana State University Department of Oceanography and Coastal Sciences. 2000.

## UNDERWATER OBSTRUCTION LOCATIONS

The Louisiana Fishermen's Gear Compensation Fund has asked that we print the coordinates of sites for which damage has been claimed in the last two months. The coordinates are listed below:

<u>Loran Sites</u>			<u>Lat. &amp; Long. Sites</u>				
26699	46978	CAMERON	29	47.404	89	48.584	PLAQUEMINES
27359	46937	VERMILION	29	51.243	93	19.213	CAMERON
27887	46854	TERREBONNE	29	38.553	90	10.048	JEFFERSON
27890	46864	TERREBONNE					
28547	46856	JEFFERSON					

## MERCY!

Even a blind fish can have a friend. A blind cod caught for the 40<sup>th</sup> time from Hardanger Fjord by a kind-hearted Norwegian fisherman was sent into retirement into an aquarium by the fishermen. The 69 year old fisherman, Harold Hauso, first caught the fish in his nets in March, 2000 and had since caught him almost every week, Hauso believes, because he is attracted to the smell of nylon.

Hauso said that he repeatedly freed the fish, blind in both eyes, because the fish was too thin to keep. "I hope he survives—he looked a bit travel sick" said Hauso. The cod will share a private pool at a marine park with a short-sighted halibut known as "Big Mama." Hauso said that he will make the 190 mile trip to the park to visit the fish if it survives.

## DOUBLE COVER FLAP TED WORKSHOP SCHEDULED

LSU AgCenter Marine Advisor Mark Schexnayder has scheduled a workshop for shrimpers on the newly approved flap modification for turtle excluder devices (TEDs) called the "double cover flap". The National Marine Fisheries Service (NMFS) approved the flap modification in June, 2001.

The reason for the new design was that in some areas, primarily the south Atlantic and Texas, large leatherback sea turtles, the largest of the sea turtle species, were not escaping from standard TEDs. When NMFS required the seasonal use of larger TED openings in those areas, single large flaps were found to be not sealing the openings well enough to prevent shrimp loss.

The double cover flap was designed to solve that problem. This flap system may also reduce shrimp loss in TEDs with standard openings as well, and therefore be of interest to Louisiana shrimpers. Schexnayder will have NMFS gear specialists at the workshop with examples of the flap. They will explain the new flap system and also

answer any other TED questions. U.S. Coast Guard representatives will also be on hand to answer TED enforcement and other questions.

The workshop will be held at 10:00 a.m., Thursday, September 20, at Alario Bros. Hardware & Fishing Supplies, 894 Avenue A in Westwego.

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## THE GUMBO POT

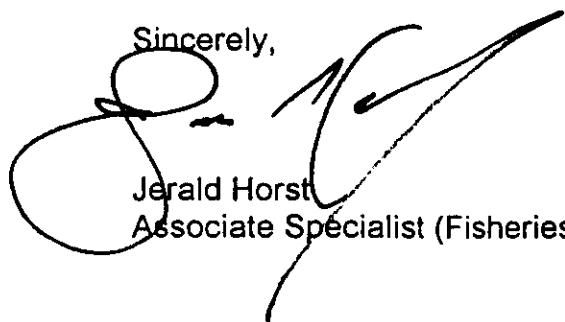
### Traugott's Sauteed Soft Shell Crabs

Soft shell crabs are a delight. Unfortunately, most people only know one way to prepare them — deep frying. This is a variation on frying. When I saw it in the *Waterman's Gazette*, the magazine of the Maryland Waterman's Association. I clipped the recipe and tried it. The herb sauce is absolutely delicious.

6	soft shell crabs		Vegetable oil
	all purpose flour		8 pieces toast
Herb Sauce			
1	stick butter	1	tsp minced fresh chives
1	tsp minced fresh parsley	½	cup white wine
1	tsp minced fresh tarragon		juice from 1 lemon
1	tsp minced fresh basil		salt and pepper

Lightly dredge crabs in flour. Heat oil in frying pan and saute crabs 2 to 3 minutes on each side. Remove to a warm platter. Discard the oil. To make the sauce, melt butter with parsley, tarragon, basil and chives in a sauce pan. Add wine, lemon juice, salt and pepper to taste. Cook until reduced by half. To serve, place crabs on toast and top with herb sauce. Serves 3

Sincerely,



Jerald Horst  
Associate Specialist (Fisheries)