

**Florida Fish & Wildlife Conservation Commission (FWC)  
Division of Freshwater Fisheries Management (DFFM)  
Annual Progress Report to be viewed by our constituency  
(Fish Orlando section)  
July 1, 2019 – June 30, 2020**

**Fish Orlando Overview:**

Fish Orlando is a program that was developed in 1998 to “Bring Quality Fishing to Families”. Research has shown that families are usually the ones that recruit new fishers. Goals of the program are to provide and promote water bodies in the greater Orlando area that are managed for quality fishing and are “family friendly” i.e. have good bank access, safe locations, etc. Because Orlando is the number one tourist destination in the world, Fish Orlando also provides information on the program that can be easily accessed by those visiting from out of state. Some of the ways we do this is through our web page ([myfwc.com/fishorlando](http://myfwc.com/fishorlando)), app, and fishing maps. These maps can be requested via [fishorlando@myfwc.com](mailto:fishorlando@myfwc.com) or picked up in the kiosk at Bass Pro Shops Orlando located just minutes from Disney, Sea World, and Universal Studios. To date well over a quarter million maps have been distributed including to fishers visiting from over 40 different states and 13 countries.



This report is not necessarily designed to be read “cover to cover”. Rather, it is a reference tool for anglers. It is broken down by the following Fish Orlando categories:

## BIG WATER BODIES

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## FANTASTIC FISHING DAYS units

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## FISH ORLANDO BIG WATER BODIES

**Overview:** These are the larger waters managed in the Fish Orlando program. They became actively involved in our work plans in 2006 and include the Butler Chain (Orange County), Conway Chain (Orange County), Johns Lake (Lake County), and the Winter Park Chain (city of Winter Park). The management goal of the BIG WATER BODIES is to **preserve, protect,** and in some cases, **enhance** the aquatic habitat. These do not have bank fishing access except for the docks associated with the boat ramps.

### **Butler Chain of Lakes (4,720 acres)**

#### **Background information:**

The Butler Chain is primarily a Largemouth Bass fishery. It also has the rare distinction of being an “**Outstanding Florida Waterbody**” which gives it extra protection when it comes to preserving its water quality and habitat. Located just minutes from Disney World, Universal Studios, and SeaWorld, it has 11 lakes in the chain: **Down** (872 acres), **Wauseon Bay** (138 acres), **Butler** (1,655), **Louisa** (145 acres), **Islesworth** (100 acres), **Tibet** (1,798 acres), **Blanche** (121 acres), **Chase** (135 acres), **Sheen** (565 acres), **Pocket** (125 acres) and **Fish** (30 acres).

The upper part of the Chain (Down – Islesworth) has deep (> 20 feet) clear water that you can often see a quarter in 10-12 feet of water. The lower part (Tibet – Fish) also has 20-foot holes but is more brownish in color from the tannin pigment caused from natural run off passing through stands of cypress and pine trees. Because the tannin color does not allow for light to grow microscopic plants and animals, the lower end does not have as many fish per acre.

In 2006-2008 the fisheries on the Butler Chain was studied intensely. Part of this was an angler survey done from Lake Down to Tibet from January – April in 2008. It showed that the chain was used extensively by guides and out of state visitors. The average Largemouth Bass catch rate was 0.58 bass per person per hour (**state average is around 0.30**). The bass anglers on the chain only harvested 4% of the legal largemouth bass caught (legal at that time was  $\geq 14$  inches). The bass fishers were evenly split when asked whether they would prefer to catch big bass or high numbers of bass, and 25% said they were pretournament or tournament fishing. Over 90% of all the anglers said they were “satisfied” or “very satisfied” with their fishing experience.

A Largemouth Bass electrofishing survey was done on the same lakes as the creel. An electrofishing survey uses a rig to stun fish temporarily with electricity, leaving the fish unharmed. It is primarily only effective in water less than 6 feet and usually does not work well when the water is clear because the fish can see you coming. Because of this, it is not surprising that we found the electrofishing results on the upper end of the Butler Chain to be relatively inaccurate in assessing the chain’s bass fishery.

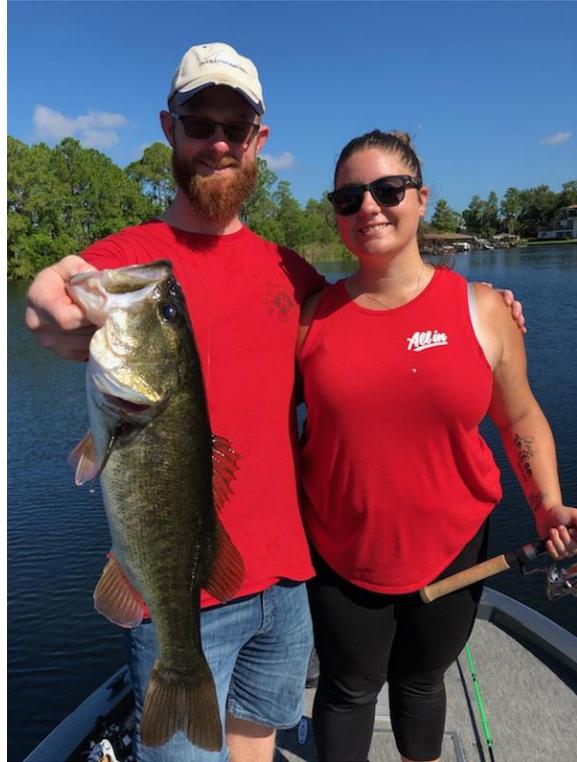
Some bass were also sacrificed to check on their age and growth. Because Florida has no winter, the only way to check growth is to take out the fish’s otoliths, located behind the brain. The fish lay a ring down on the otoliths each year, similar to the trunk in a tree. The results showed a significant increase in largemouth growth when compared to data 20 years before. Historically it took 5-6 years to grow a 14 inch bass; in 2007 it took 3-4 years.

The increase in growth rates was most likely because in the past three decades houses were built around nearly the entire chain. This caused increases in fertilizer run off and production of plankton. Plankton is the base of the food chain, so more plankton means more

food and faster fish growth. The relatively more restrictive code requirements for a Florida Outstanding Waterbody allows for leaving cypress trees, aquatic vegetation, and protection of the watershed, but does not eliminate yard runoff after a rain.

Currently our primary goal on the Butler Chain is to make sure there are adequate amounts (30-70%) of submersed **native** aquatic plants, i.e. plants that do not grow above the water level. When these plants are present in healthy portions, the good bass fishing follows. Examples of these types of plants are eelgrass, peppergrass, coontail and carpet grass.

An annual vegetation survey is done (usually in the fall), to see if the native aquatic vegetation is meeting the fishery's needs. We also comment on the proposed annual plant treatments overseen by the FWC's Invasive Plant Section as well as work with them throughout the year if problems arise. In addition to the aquatic plant evaluation, the Fish Orlando staff contacts fishing guides and local anglers, as well as checks tournament results, to keep a current "pulse beat" on the bass fishing.



**Current information:**

Our annual vegetation survey was done in July 2019. The chain had adequate amounts of submersed native aquatic plants to produce high quality Largemouth Bass fishing. Visibility in the north end of the chain was around 10 feet which was better than the two surveys following hurricane Irma in September 2017.

This fiscal year showed a reduction of guides using the Butler Chain when compared to the last few years. A reduction of trophy bass ( $\geq 24$  inches) and the anticipation of Orange County passing rules that required guides to register, show proof of liability insurance, and buy an annual pass, may have caused some guides to fish elsewhere.

Those guides that continued to fish the chain noticed a reduction in trophy bass but had excellent action for bass in the 2-3lb range. Tournament anglers, and lakefront homeowners that fish the chain, also noticed a reduction in trophy bass. Add to this the fact that no TrophyCatch bass were documented in FY 2019/2020, and it looks like the peaks in trophies observed in 2016 – 2018 is over. The peak was most likely due to strong year classes produced following the droughts in 2006; most bass do not live much beyond 8 - 10 years.

## Conway Chain of Lakes (1,800 acres)

### **Background information:**

Like the Butler Chain, the Conway Chain is primarily a Largemouth Bass fishery. It is characterized by its deep (> 20 feet), clear water, where during winter months; you can sometimes see a quarter in 15 feet of water! It has an east and west north lobe, a middle lobe, and a southern lobe. Its “claim to fame” is the fishing action for schooling bass that chase Threadfin Shad on the surface of the water.

An angler survey was conducted in **2011**. The average Largemouth Bass catch rate was 0.88 bass per person per hour (**state average is around 0.30**) and bass anglers only kept 10% of the legal sized bass (during the survey the statewide regulation was a 14 inch minimum size). The fishers were evenly split when asked whether they would prefer to catch big bass or high numbers of bass. Although the lake is entirely rimmed with houses, 72% of those fishing the chain did not live on the lake. When asked to rank the chain where 1 was the worst and 5 the best, 77% of all the anglers ranked the chain as a 4 or 5.

Guides did use the chain, but it was limited to when extremely cold weather “balled” up the shad pods on the shallow submersed vegetation and they used cast nets to capture live threadfin shad. Circular live wells kept the shad alive and scoops of shad were used to “chum” bass to an anchored boat where a single shad was nose hooked and allowed to free line into the chum. Catches of over 100 bass in half day fishing were common.

A Largemouth Bass electrofishing survey was also done in 2011. Like the results on the Butler Chain, the clear water of the Conway Chain did not allow for accurate assessment of the bass population using electrofishing.

In February 2016, the FWC Invasive Plant Section stocked 2,500 Grass Carp to address complaints of excessive “peppergrass” (i.e. Illinois pondweed) around homeowner’s docks in the north lobes. Grass Carp are a sterile fish from Asia that will eat the exotic plant hydrilla before eating other native plants. The Conway Chain was the first water body in Florida to successfully use grass carp to control hydrilla and still maintain healthy amounts of native plants with a good bass fishery. Successful aquatic plant management using Grass Carp has been done on the Conway Chain for over 3 decades.

Despite the amazing bass fishing action on Conway, one of the complaints for over a decade has been the lack of bass  $\geq 20$  inches (this was confirmed in the 2011 creel). Historically back in the 1990’s, the schooling action was good but catches of these quality bass was more common.

One reason for the decline could be reduced number of nutrients going into the chain. There have been several projects on lakes that flow into the chain, where local government has worked with lakefront homeowners to reduce the amount of nutrients in their lake. A reduction in nutrients means less fish growth. Another reason could be that less people are harvesting bass. This would cause crowding and slower growth.

Presently, our goals and yearly activities on the Conway Chain are the same as the Butler Chain i.e. work with plant managers to provide good habitat and keep in touch with our stakeholders to assess the bass fishery. However, for the third straight year we also worked with the weekly Wednesday night tournament to encourage harvest of the smaller (< 14-inch) bass. This was made possible, because the statewide Largemouth Bass regulation allows for a daily bag limit of 5 bass < 16 inches. Since August 2017, tournament organizers modified their rules to encourage harvest of bass < 14 inches by changing the self-imposed tournament minimum size

limit from 14 to 10 inches. Additionally, as part of their long-standing rules, they do not apply for an FWC exemption that allows them to bring in more than 1 bass per person  $\geq 16$  inches. The winning weights are based on the best 5 bass caught by the 2-person “team”, and the tournaments are usually held only during daylight savings time in March - October. To their credit they donate the smaller bass to a local charity that uses them for food.

### **Current information:**

All the lobes in the chain were surveyed for submersed vegetation in December 2019. Like the Butler Chain survey, the watercolor had improved slightly when compared to the years immediately following hurricane Irma in 2017. There were adequate amounts of submersed aquatic native vegetation in all areas of the chain out to 17 feet. Areas of the north lobe that previously had too much “peppergrass” around the shoreline areas looked much better than the last few years.

Like last year, it appeared that there was a slight improvement in the number of bass  $\geq 20$  inches caught on the Conway Chain. In March 2020, two Fish Orlando biologists and a volunteer fished lures on their own time. They were able to catch 51 bass in a 4-hour trip which included 3 bass over 20 inches. Several others in the 3lb range were also caught. The bigger fish were caught adjacent to a spawning flat next to deep water.



During the months of January – March 2020, the project received approximately 20 “big bass” pictures from bass anglers boasting of the improvement in quality bass caught on the Conway Chain. All the fish in the pictures were caught using artificial lures. However, a couple non-tournament anglers that frequently fish the chain did call to complain of the lack of quality-sized bass in their fishing trips. The difference of perspective in angler reports indicate there is still plenty of room for improvement in the bass  $\geq 20$  inches.

Due to a relatively warm winter, there were not many guides that used the chain in 2020. However, in 2019/2020, the weekly Wednesday night tournament showed an approximate 1-2lb improvement in the average winning weight when compared with tournaments before August 2017. They also had several winning tournament stringers in 2019/2020 that were in the 15 – 20lb range.

Since the 2011 creel revealed that so few bass are harvested voluntarily, the slight improvement in quality bass may be due to the weekly Wednesday night tournament helping reduce the numbers of small bass. According to a tournament regular, from 2017 – 2020, the weekly tournament removed approximately 50 small bass per tournament. In 2020, more anglers in the tournament started participating in the activity, and approximately 70 bass per tournament were removed.

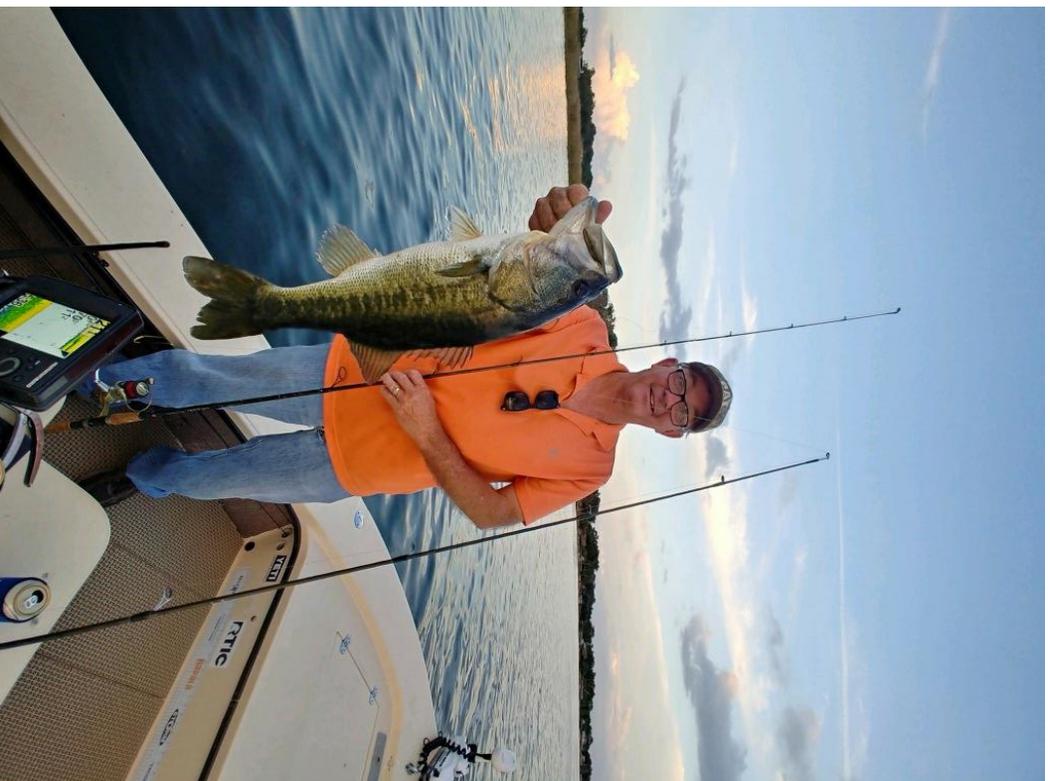
They started the program in August 2017. Therefore, from August 2017 - November 2017 they removed approximately 800 small bass (16 Wednesdays x 50). From March– November 2018 they removed approximately 1,900 bass (38 Wednesdays x 50 bass). From March– November 2019 they removed approximately 1,750 small bass (35 Wednesdays x 50 bass).

Due to the COVID19 situation, the Conway Chain boat ramps were shut down, and no tournaments were conducted from March 25<sup>th</sup> – May 20<sup>th</sup>. However, for the first time ever they

did hold tournaments in February. From February 2020 – June 2020, they held 12 tournaments that removed 840 bass.

Given the above summaries, the total numbers of small bass removed to date is approximately 5,290. Given there is still room for improvement, the Fish Orlando project leader is encouraging these anglers to remove even more smaller bass. An idea is being proposed to hold a couple of larger charity tournaments in addition to the weekly Wednesday night tournaments. The charity tournaments would be held using the same rules as the weekly tournaments, with the small bass being given to charities as food.

It is important to realize that while the tournament may be helping “trim” some of the smaller bass allowing some individuals to grow bigger, the numbers removed are still a small percentage of the total stock of fish in this very productive bass fishery. Their removal has not impacted overall catch rates.



The Fish Orlando team partnered with the weekly Wednesday Night Bass tournament to remove smaller bass to improve the numbers of bass  $\geq 20$  inches. The effort appears to be working!

## **Johns Lake (2,424 acres)**

### **Background information:**

The lake is primarily a bass fishery; however, unlike the Butler and Conway Chains, at times there are a decent number of fishermen that fish for the lake's Black Crappie (speck), Bluegill, and Redear Sunfish (shellcracker). Most of Johns Lake also has deep holes (15–20 feet), but it is not nearly as clear as Butler and Conway. During clear water episodes you may be able to see a quarter as deep as 6 feet. The eastern end of the lake near the Florida Turnpike is much shallower than the rest of the lake (< 8 feet), and it sometimes has a darker tannin color from the water it receives from Black Lake.

Johns Lake is driven by naturally fluctuating water levels, which during low water periods, expose sections of lake bottom that in turn grow non-aquatic or terrestrial plants. When the lake levels come back up, these terrestrial plants help produce increased numbers of insects and small fish that graze on the algae that covers these plants. In 2001, during an extreme drought, the lake dried up enough to where you could drive a car off the boat ramp and across the lake bottom. In 2003, it refilled, and our region restocked the lake with 250,000 fingerling bass. Although only a small percentage of bass stocked ever survive beyond a year, what does survive is enough to become the brood stock to repopulate the lake.

Year classes were produced following this drought that resulted in peak quality bass fishing from approximately 2007–2012. Following 2012, most of the terrestrial vegetation that had grown on the lake bottom during the drought had decomposed.

Because rainfall patterns do not always provide enough water level fluctuations on Johns Lake to provide high quality fishing, in October 2014, we worked with the local FWC Invasive Plant Section biologist, duck biologist, and Lake County aquatic plant manager, to incorporate a hydrilla management plan. The plan involved leaving the hydrilla grow in sections of the lake that did not have houses along the shoreline. It also involved stocking low numbers of grass carp to complement the small, but more frequent, herbicide treatments. This allowed the hydrilla to provide beneficial habitat for the fish without taking over the lake. The plan is still in place today.

In April 2017, Fish Orlando staff toured Johns Lake with an FWC Habitat and Species biologist to see if associated marshes around the turnpike could be enhanced to increase their fishery value. On May 2, 2018, sites in the northeast side of the lake were picked for a vegetation shredding project. At the end of May 2018, a company was hired to open areas that had previously been too dense for fish habitat. The contractor used “barge-like” boats driven by paddle wheels. Attached to the boats were large metal circular “cookie cutter” blades that chopped the vegetation into fine particles that could be quickly broken down by bacteria. A total of 36 acres (at a cost of \$38,365) were restored to good fisheries habitat, which combined with the 15 acres removed by hurricane Irma prior to the project, opened 51 acres in the northeast corner of the lake.

Johns Lake is part of the Long-Term Monitoring Study conducted by our FWC research division (Fish and Wildlife Research Institute). As part of the standardized format associated with the Study, we conduct angler surveys every three to five years. The survey in **2011** showed a world class bass fishery that had approximately 800 trophy bass (i.e.  $\geq 24$  inches) caught in a four-month period (January – April)!

During the same 2011 survey, only 4% of the legal sized bass were harvested by Largemouth Bass fishermen (legal sized bass were  $\geq 14$  inches at the time of the survey). Of

those bass fishing, 41% were either tournament or pretournament fishing. Over 60% of the bass fishermen preferred to catch big bass instead of numbers of bass, which is not surprising considering the number of big bass being caught in 2011. What is surprising, however, is that despite world class bass fishing, almost no guides were using Johns Lake in 2011. All anglers were asked to rank the lake from 1–5, with 5 being the best; 82% ranked it a 4 or 5. Approximately 92% of the anglers fishing the lake did not live on it.

The survey in **2016** showed Largemouth Bass catch rates that were one bass per man hour i.e. the same as 2011 (**state average is around 0.30**). However, there was a significant reduction in quality bass (less than 100 trophy bass caught January – April). As mentioned above, this was most likely due to the breakdown and elimination of flooded terrestrial vegetation from the 2001 drought, and the natural deaths of the strong Largemouth bass year classes produced the years following the refill and restocking of the lake.

The survey in **2019** showed that the hydrilla management plan and habitat work had improved the bass quality. Approximately 400 trophy bass were caught between January – April! Unlike 2011, there were several guides taking advantage of the quality bass fishing.

Additional information obtained in the 2019 survey showed that 71% of the bass anglers were aware of the 2016 statewide bass regulation. Around 64% of the bass anglers were aware of the TrophyCatch program. The bass anglers still primarily practiced voluntary catch and release as only 7% of the < 16-inch bass caught were harvested; almost no bass were kept  $\geq$  16 inches.

In addition to angler surveys every 3-5 years, being part of the Long-Term Monitoring Study requires that we use an electrofishing rig to sample the bait and rough fish (Gar, Mudfish and Chain Pickerel) in the fall, and the Largemouth Bass in the spring. We started the fall electrofishing in 2013 and the spring electrofishing in 2011.

### **Current information:**

Fall 2019 electrofishing showed no major changes in baitfish or rough fish populations since 2013. However, Largemouth Bass quality appears to be improving following



implementation of hydrilla management in 2014, and habitat enhancement conducted in 2018. Based on electrofishing, from 2013 – 2017, 20-inch plus bass composed around 2% of the adult bass population. From 2018 – 2020, electrofishing results showed they represented 4-6% of the adult population (4% in 2020).

The same trends in improved Largemouth Bass quality were also noticed in this year's guide reports, angler reports, Wednesday night weekly tournament results, and TrophyCatch bass (20 in FY 19/20!).

Project personnel worked with the FWC Invasive Plant Section to do an October 2019 hydrilla treatment that focused on areas in front of the houses and inside the grass lines. The results were

outstanding, allowing good native plant coverage inside the emergent grass lines, and some deep water hydrilla in areas where there were fewer houses. In February 2020, the FWC Invasive Plant Section followed up with a smaller 30-acre hydrilla treatment in front of the houses on the north-shore to maintain the work done the previous fall. An additional 300-400 grass carp were also added in June 2020 to complement the 1,000 stocked in June 2019. Even with the additional carp, the total number in the system is relatively low, i.e. a little over 1 carp/acre. The goal of the carp is to reduce frequency and acreage of the hydrilla treatments while still providing for deep water hydrilla in areas without houses.

### **Winter Park Chain (969 acres)**

#### **Background information:**

The Winter Park Chain is also primarily a Largemouth Bass fishery. There are 6 lakes in the chain: **Virginia** (224 acres), **Mitzell** (60 acres), **Osceola** (136 acres), **Maitland** (451 acres), **Nina** (<10 acres) and **Minnehaha** (98 acres). It is characterized by deep (> 20 feet) holes and abundant submersed native aquatic vegetation. On Virginia and Mitzell the water is very clear, and you can see a quarter in 10 feet of water. The water color from Osceola to Minnehaha ranges from extremely green to slightly green depending on the weather and wind.

An angler survey was conducted in **2012**. The average Largemouth Bass catch rate was 1.7 bass per person per hour which was the highest ever recorded in central Florida (**state average is around 0.30**)! There were more bass  $\geq$  20 inches in the Winter Park Chain creel than in the 2011 Conway Chain creel, but less than the 2008 Butler Chain creel and the Johns Lake creels (2011, 2016, and 2019). Bass anglers harvested a “mere” 2% of the legal size bass caught, which at the time were bass  $\geq$  14 inches. It had no guide presence and very few out of state fishers. The fishers were evenly split when asked whether they would prefer to catch big bass or high numbers of bass. While almost entirely rimmed with houses like Butler and Conway, 95% of those fishing the chain did not live on the lake. When asked to rank the chain where 1 was the worst and 5 the best, 76% of the anglers ranked the chain as a 4 or 5.

A Largemouth Bass electrofishing survey was done during the same year and time period as the angler survey. Because the water is not as clear as the Butler and Conway chains, the electrofishing did accurately depict the bass population with an average of 117 bass shocked per hour (60 per hour is decent on deep water lakes like the Winter Park Chain).

Both the creel and electrofishing data were summarized for the city of Winter Park lakes managers for use in their lakefront homeowner’s newsletter. Despite very few homeowner’s fishing the chain, they were interested in knowing about the fishing.

In response to fishermen complaints in late 2013/early 2014, spring 2015 electrofishing was conducted on Lake Virginia. Electrofishing catch rates in 2015 were 70 bass/hr versus 117 bass/hr in 2012. However, the disparity was primarily due to bass < 12 inches and catch rates were still good. Given the good habitat available in most lakes in the chain and the fact that fishermen complaints subsided in 2015, it is our conclusion that the 2012 surveys were on the high end of “normal” for this chain.

Our current goals and yearly activities are the same as the Butler and Conway Chains. In other words, coordinate with aquatic plant managers and keep a “pulse” on the bass fishery.

**Current information:**

The aquatic vegetation was surveyed in September 2019. Like the Butler and Conway Chains, clarity was a bit better than the years directly following hurricane Irma. Also, like Butler and Conway, there were adequate amounts of submersed aquatic native vegetation in all areas of the chain. The daily boat ramp pass via Dinky Dock on Lake Virginia available via the city of Winter Park web site (<https://cityofwinterpark.org/departments/public-works/lakes/boating>) was posted on the signage at the ramp by fall 2019.

Angler reports and the weekly Thursday night tournament have indicated good fishing; especially for 4-5lb bass. For the first time since the Winter Park Chain has been in the Fish Orlando program, there is a guide working the Chain on a weekly basis. He has been doing well with his clients catching bass up to 7 lbs on shiners.



Angler reports on the Winter Park Chain have been good for bass in the 4-5lb range.

**FISH ORLANDO FAB FIVE**

**Overview:**

The FAB FIVE are 5 water bodies managed for a unique and/or quality fishing experience. They are Clear Lake (city of Orlando), Lake Ivanhoe (city of Orlando), Starke Lake (city of Ocoee), Turkey Lake (city of Orlando), and Lake Underhill (city of Orlando). They

were picked in 1999 based on potential and support from city and county partners. In April 2006, Lake Ivanhoe replaced Kirkman Pond as a FAB FIVE. In May 2007, Lake Underhill replaced Shadow Bay Park as a FAB FIVE. Both Kirkman Pond and Shadow Bay Park were dropped due to increases in vandalism and poaching in the Metro West area. While each water body has its own unique management plan, cast nets are not allowed on any of the FAB FIVE in order to protect the vegetation and to make it easier for our FWC wildlife officers to keep people from illegally netting sport fish.

### **Clear Lake (319 acres)**

#### **Background information:**

Clear Lake is managed for neighborhood residents as a quality put-grow-take Hybrid Striped Bass fishery from November – March, and a quality Channel Catfish fishery from April – October. Since its inception as a FAB FIVE, two fishing piers (making a total of 3) and 2 kiosks have been built.

The Hybrid Striped Bass is created in our hatcheries. It is a cross between a White Bass and a Striped Bass; it is sterile. In Clear Lake, and many other Florida lakes, the fishery is composed of age 1 and 2 fish. Hybrids 3 years or older require cold water (low 70's) to make it through the summer.

The Clear Lake management goal is to maintain Hybrid Striped Bass catch rates in experimental gill nets at or above 0.25 fish/net hour, with average size age 2 fish being 12-14 inches. Based on our angler survey in winter 2004, this gill net catch rate is equivalent to fishing action that is slightly less than one Hybrid Striped Bass caught per angler per hour.

This goal is accomplished by stocking approximately 15,000 phase 1 (less than an inch) Hybrid Striped Bass each March/April, and working with the city of Orlando and the FWC Invasive Plant Section to keep hydrilla levels at less than 10% so plankton and Threadfin Shad are abundant for the hybrids. When we were developing the stocking science necessary to achieve our goals, we would do the hybrid striped bass surveys every winter. Now they are done every four years. The Hybrid Striped Bass survey in winter 2018 indicated we exceeded all our management goals. The next survey is scheduled for winter 2022.

#### **Current information:**

A vegetation survey was done in October 2019. No hydrilla was sampled in any of the transects and there was a good algae bloom in the deep water, which should have created good conditions for Threadfin Shad, the primary food for the Hybrid Striped Bass. At the request of Fish Orlando staff, Richloom hatchery stocked 16,630 phase 1 Hybrid Stripers in April



2020. These should be big enough to catch by fall 2020/winter 2021.

Angler reports on the winter 2020 hybrid fishery were good. We even had reports of bass fishers catching them on crankbaits as bycatch.

The summertime Channel Catfish fishery should be peaking in the next couple years. At the request of Fish Orlando staff, Richloom Hatchery stocked 15,650 phase II (approx 8 inch) Channel Catfish in October 2018. This brings the total stocked since 2016 to over 30,000 Channel Catfish. Fish Orlando's management strategy is to stock approximately 30,000 phase II Channel Catfish every 4-5 years. This relatively low stocking density spaced several years apart creates fairly abundant Channel Catfish in the 2–10lb range. The Channel Catfish require cavities to spawn, and because there is almost no Channel Catfish spawning habitat in Clear Lake, the number we stock is what will be out there minus stocking mortality and angler harvest.

The fish attractor buoys were removed from Clear Lake in October 2019. The attractors had cinder blocks that were designed to attract channel catfish. But like the brush attractors before them, anglers did not make use of the attractors. Given the cost to maintain buoys, and refurbish attractors, it was decided to not continue this management aspect on Clear Lake.

## **Lake Ivanhoe (125 acres)**

### **Background information:**

The goal of Lake Ivanhoe is to manage it as a quality Largemouth Bass fishery for greater Orlando residents. It has three lobes separated by two bridges with an information kiosk at the boat ramp, and an aeration system (to keep high oxygen levels) in the most western of the 3 lobes.

We like to see electrofishing catch rates of 60 largemouths per hour with at least 30% of the adult bass 14 inches or greater. This is very “doable” when we partner with the city of Orlando and the FWC Invasive Plant Section to maintain submersed native vegetation levels at 30% – 70%. Small stockings of Grass Carp along with small hydrilla treatments using herbicide has allowed us to be successful in keeping “lush” submersed aquatic native vegetation and strong bass populations.

We do a winter/spring Largemouth Bass electrofishing sample every two years to see if Fish Orlando management objectives are being met, and so the FWC's Fish & Wildlife Research Institute have the data they need to evaluate the 2016 statewide bass regulations. We also do a vegetation survey every year.

Electrofishing objectives have been met every sample since the lake became a FAB FIVE in 2007. In fact, the winter 2019 electrofishing survey showed 7 bass per hour were sampled that were 20 inches or more. This was the highest value recorded in the history of electrofishing the lake.

After becoming a FAB FIVE it took some time to “dial in” the right ratio of grass carp and herbicide treatments. However, we have met management objectives for aquatic plant coverage since 2014.

**Current information:**

The October 2019 vegetation survey indicated continued good submersed aquatic plant habitat. However, the watercolor in the areas around the I-4 expansion project have become uncharacteristically stained green despite intact turbidity barriers.

A Largemouth Bass electrofishing survey is scheduled for winter 2021. If the watercolor has not improved by then, we will have to investigate whether the I-4 expansion project significantly increased the nutrient load, despite what the planners predicted.

The I-4 expansion project is wrapping up around the lake area, but it did not allow anglers to access the middle and western lobes from approximately January – March 2020, due to demolition of the old bridge. The Fish Orlando team allowed the road expansion leaders to post the lobe closures in the Fish Orlando kiosk.

Anglers have reported good bass fishing during the fiscal year. Apparently, action is better in the middle lobe and west lobe. Size is better in the east lobe.

**Starke Lake (225 acres)****Background information:**

Starke is managed as a quality Largemouth Bass fishery for greater Orlando residents. Located right next to Ocoee's city hall, it is the "pride and joy" of the city. Management actions that the Fish Orlando team has accomplished since Starke became a FAB FIVE include: (1) building a fishing pier (2) enhancing the shoreline on Lakeshore Drive by removing nuisance vegetation and replanting with beneficial native vegetation (3) constructing "fishing lanes" along this enhanced shoreline (4) deploying 3 fish attractors marked with "Fish Attractor" buoys (5) establishing lake chubsuckers as a baitfish to grow bigger bass and (6) building two informational kiosks located at the boat ramp and pier.

The management goals are (1) to be able to shock 100 bass per hour with 20% of the adult bass 14 inches or bigger and (2) maintain nuisance and exotic vegetation in the enhanced shoreline on Lakeshore Drive below 10% coverage, and keep the area around the pier and fishing lanes open. The project does a Largemouth Bass electrofishing sample every winter/spring as well as works with the city of Ocoee and the FWC Invasive Plant Section to accomplish vegetation goals. Additionally, we provide feed for the volunteer that hand feeds from the pier and do a monthly check of the fish attractor buoys and kiosks.

From the time Starke was made a FAB FIVE until 2012, fisheries management goals were achieved. However, in winter 2012 an experimental herbicide was used in a hydrilla treatment that "wiped out" all the submersed aquatic vegetation. The lake turned greenish brown, and even though the submersed vegetation has since recovered, there have been problems with undesirable blue green algae. The city of Ocoee has done two studies to determine the extent of the blue green algae problem and paid a contractor who found that the problem is coming from the prima vista lobe in the southwest portion of the lake. Currently, they are evaluating action steps to rectify the problem.

Lastly, Starke Lake is the only known water body in Florida that has a large population of Koi Carp. First discovered while electrofishing in 2008, their numbers swelled in 2017 to the point that pier anglers targeted them using feed flies. A total of 42 Koi were removed via electrofishing (39) and cast netting (3) through March 2019. Anglers have removed another 40.

**Current information:**

For the eighth consecutive year, we did not meet our management goal in our winter/spring Largemouth Bass electrofishing survey. Although we did not reach our target value of 100 bass per hour, for the fourth straight year we shocked a respectable 80+ bass per hour and achieved our quality goal of having 20% of the adult fish be  $\geq$  14 inches.

The volunteer (Wayne Hook), who feeds the fish at the pier in the morning and evening, reports that fishing has been average to poor. The greenish brown watercolor that improved slightly the last couple years took a turn for the worse in September 2019 when a contractor pumped turbid water from a nearby development site into the lake via the ditch next to City Hall. The same developer had done this earlier in the summer.

Plans to discuss actions to improve water quality in FY 19/20 had to be tabled due to COVID19. Ocoee Public Works did remove nuisance vegetation around the fishing pier and in the fishing lanes in June 2020.

In March 2020, we removed 3 Koi while electrofishing for largemouth bass. This brings the total removed by the FWC and anglers to 85. Numbers of Koi Carp have dwindled to the point where Wayne says he rarely sees Koi eating the feed around the pier.



Winter 2020 Starke Lake Largemouth Bass electrofishing survey

Lastly, on October 26, 2019 we partnered with the city of Ocoee to hold the 19<sup>th</sup> Annual FAB FIVE Family Fishing Event as part of the Ocoee Founder's Day activities. The Fish Orlando staff, their family members, and a volunteer from Orlando Outfitters helped the event run smooth. As always, the families in Ocoee appreciated the event.

### **Turkey Lake (339 acres)**

#### **Background information:**

Turkey Lake is located just minutes from the Orlando attractions near International Drive. Public access is possible through the city of Orlando's Bill Frederick Park. It is managed as a quality Largemouth Bass and Black Crappie (speck) fishery for both Florida residents and visitors from out of state.

When the park was built there was a deed restriction that did not allow for a public boat ramp, therefore, a partnership between the city of Orlando, Bass Pro Shops Orlando, and FWC was established to provide a boat loaner program. Four aluminum Bass Pro Shops Grizzly Jon boats are rented (407-246-4486) through the city of Orlando for four hours, Thursday-Sunday. While bank fishing has unlimited hours, boat fishing hours are restricted to limit effort and maintain a quality fishery. The quality is also maintained by a Largemouth Bass catch and release regulation, a prohibition of gas motors, and our city of Orlando partner spending thousands of dollars to maintain good fisheries vegetation.

In addition to the above-mentioned work, since Turkey Lake became a FAB FIVE, the Fish Orlando team has built 3 fishing piers (4 total), installed 3 fish attractors marked with fish attractor buoys, conducted two habitat enhancement projects that removed nuisance native vegetation and replanted beneficial plants, and installed four informative kiosks.

Considered the "crown jewel" of the Fish Orlando program, the work on Turkey Lake has not gone unnoticed. It has been featured in numerous magazines such as Bassmaster and Florida Sportsman, as well TV shows on TNN and ESPN. Families from over 40 states and 13 countries have taken advantage of the boat loaner program.

The management goals of the lake are to have bass fishers using the boat loaner program average a largemouth catch rate of 0.5 bass per hour and crappie fishers average a Black Crappie catch rate of 0.5 crappie per hour. We also would like the average crappie caught to be  $\geq 10$  inches. We are able to check and see if we are meeting our goals by having one patron from each boat fill out a survey form where they record the length of each fish they catch. We also do a monthly check of the vegetation, fish attractors, and kiosks to make sure they are "up to par".

**Current information:**

As seen from the table below, families continued to enjoy the fishing at Turkey Lake from Tracker Grizzlies donated by Bass Pro Shops Orlando.

<i>Turkey Lake stat</i>	<i>This year's value</i>	<i>Total or Avg since 2001</i>
No. that used boats	633	15, 587
% that were families	53%	31%

Management objectives were exceeded for Largemouth Bass (0.77 bass per man-hr) and Black Crappie (0.71 crappie per man-hr; 90%  $\geq$  10 inches). Due to COVID19, the boats were not available to the public from March 25<sup>th</sup> until June 30<sup>th</sup>. Despite the closure, in FY 19/20, bass anglers still spent over 2,200 hours bass fishing in the Turkey Lake boat loaner program. Crappie anglers created a new record low by only spending 40 hours targeting “specks”.



Bill Frederick Park opened back up the boat loaner program on July 5, 2020. When the anglers returned, they had the chance to fish the 3 fish attractors that were recently refurbished in April 2020. Each of the fish attractor buoys were crisscrossed with 25 mossback artificial trees that have been scientifically proven by the FWC’s Fish and Wildlife Research Institute to attract fish as effectively as brush. Believe it or not, the branches of the Mossback artificial trees were made of recycled toothpaste tubes!

While boat fishing is certainly the best bet on Turkey Lake, the attempts by the Fish Orlando team to provide access for the non-boater have been successful. Several good catches have been made from the fishing piers including a 16lb 9oz bass caught in winter 2020.



Several good catches have been made from the fishing piers including this 16lb 9oz bass!

For the second straight year, the staff at Bill Frederick Park generously partnered with Bass Pro Shops Orlando and the Fish Orlando program to put on a Cancer Survivor event in December 2019. Participants received free rods/reels/tackle at Bass Pro Shops Orlando along with fishing instruction. After starting in the store, they then spent time outside at the Park catching fish from the boat loaner boats, eating lunch, and swapping fish stories.

For the first time in eight years, the FWC's Florida Youth Conservation Center Network Camp (Aquatic Wonders), had to be cancelled due to COVID19. The Fish Orlando staff look forward to picking up right where they left off by conducting an electrofishing and fish dissecting demonstration on one of the days at the camp in June 2021.

### **Lake Underhill (147 acres)**

#### **Background information:**

This circular "bass factory" is divided down the middle by the 408 Toll Road, and bordered to its north, by the Orlando Executive Airport. It is managed as a high quality Largemouth Bass fishery for greater Orlando residents. Success is achieved two ways: (1) a Largemouth Bass catch and release regulation, and (2) a hydrilla management program that

allows for deep water hydrilla (12-17') and shallow (< 8') native submersed plants. We partner with the city of Orlando and the FWC Invasive Plant section to use grass carp and small herbicide treatments to achieve the balance. A kiosk at the boat ramp informs anglers of the largemouth bass catch and release regulation as well as other Fish Orlando information.

The management goal is to shock 60 bass per hour with 40% of the adult bass 14 inches or greater. While a goal with this high a quality may seem ambitious, thanks to good teamwork with the FWC Invasive Plant Section and the city of Orlando; this goal is very realistic. Angler reports are usually positive, and to put it in perspective, when B.A.S.S. had its headquarters in Celebration Florida, they would take their VIP's to Underhill to show them good Florida bass fishing.

While we do our Largemouth Bass electrofishing survey every four years, we annually survey the vegetation and work closely with our two partners mentioned above, to plan treatments and Grass Carp stockings. Additionally, we contact anglers that routinely fish the lake to get the latest feedback on the bass fishery.

### **Current information:**

Vegetation was surveyed twice (December 2019; January 2020). Following the surveys, in March 2020, the FWC Invasive Plant Section treated approximately 30 acres of hydrilla that included both the north and south lobes.

Our Largemouth Bass electrofishing survey was conducted in February 2020. Management objectives were achieved (91 bass/hr with 46%  $\geq$  14 inches).

Bass fishing continues to be incredibly good with fishing pressure going "through the roof" during the COVID19. For example, on one day in May 2020, 18 boats and 25 bank anglers were documented fishing this 147-acre water body!



Robert Rapalje with a Lake Underhill 9lb 13 oz TrophyCatch bass caught 9/19/19 (TrophyCatch.com).

## FISH ORLANDO FANTASTIC FISHING DAYS

### **Overview:**

FANTASTIC FISHING day units are smaller water bodies that are managed intensively but are only open to the public on a limited basis to keep the fishing pressure light and the fishing “FANTASTIC”. Target catch rates for events are 2 fish per child as opposed to the URBAN PONDS where the target catch rate is 1 fish per child. For waters to be in the program there must be a way to control access via a fence, security, etc. In addition to controlling access, the partners buy Channel Catfish, hire vegetation contractors, and purchase fish feed. We give them advice on stocking and feeding rates and techniques, help stock the fish they purchase, provide expertise on vegetation management, and in some cases, do limited fisheries management actions with our staff (fish removal, wild fish stocking, electrofishing evaluation, etc.). In general, we recommend they establish fish feeding 3 times per week from 3 designated locations around the pond. We also try to attend one of the events when they open the fishery to the public.

### **Canoe Creek Pond (< 1 acre)**

#### **Background information:**

Canoe Creek Pond was stocked with 100 Channel Catfish in October 2012 and May 2017. It had to be stocked again in May 2018 with an additional 125 Channel Catfish because of poor survival of the May 2017 stocking.

A fish feeding program (50lb bag a month) was established in May 2018. In 2018 Canoe Creek Christian Church improved the access around the pond with a controlled burn and a bush hog, but the work was not maintained.

Events were held for the public in October 2012 and March 2018. Target catch rates were achieved in 2012. The 2018 event did not meet management objectives due to poor survival of the May 2017 stocking. An Easter fest event was held in April 2019 that reached 500 people. Target catch rates were achieved by the 50 plus families that fished the pond. Osceola Teen Anglers assisted the families.

#### **Current information:**

The Fish Orlando project leader met with the leader in charge of the pond to further describe management objectives of a FANTASTIC FISHING DAY unit and come up with plans to treat and maintain the vegetation around the pond. The fishing platform originally planned in 2019/2020 was “tabled” due to various challenges. Unfortunately, the 2020 Easter fest event also had to be cancelled due to COVID19.

## **Central Winds Park Pond (Approximately 1 acre)**

### **Background information:**

Central Winds Park Pond became part of the program in May 2017. The city of Winter Springs created good bank access, wired electricity, installed a fountain, and investigated purchasing an aeration system. The pond was stocked with 500 Channel Catfish in May 2017. An FWC alligator trapper was called in several times by the city of Winter Springs to remove alligators that were eating the catfish.

The first FANTASTIC FISHING DAY event (April 2018) at the park was a resounding success. In addition to city of Winter Springs and Fish Orlando staff, the Orange County Teen Sport Fishing Association helped approximately 30 children, accompanied by their parents; catch over 150 fish during the event! A fishing camp was held on two Saturdays following the event and was staffed exclusively by city of Winter Springs employees. The camp had equally good fishing action, and like the event, the parents/mentors were required to attend with the children.

The second annual “Fish Winter Springs” family fishing event was held in April 2019 followed by a Friday night/Saturday morning fishing camp in May 2019. The catch rates were like the first event and camp. Orange County Teen Sport Fishing Association stepped up again to help the families at the event. In addition to the Channel Catfish and Bluegill action, a significant number of Tilapia was caught at both the event and camp. Tilapia eat the algae on the stems of plants, but in the presence of fish feed, which has plant material, they will eat the fish feed and then be “fooled” by pieces of worm that look like the feed.

### **Current information:**

Due to COVID19, the official 3<sup>rd</sup> annual Fish Winter Springs event and fishing camp scheduled to be held in April/May 2020, had to be cancelled. However, Winter Springs did hold their own smaller event at the end of June that practiced social distancing and had fewer participants (20). All the families experienced fishing that met management objectives. Two city of Winter Springs Commissioners attended the event. Given the current COVID19 policy, FWC staff and volunteers were not able to attend.

Plans were made with the new Parks & Recreation Director, to re-stock the pond with 500 channel catfish in the spring of 2021. The annual Fish Winter Springs event, followed by the fishing camp, will be hopefully be re-instated in 2021.

## **Cornerstone Pond (2 acres)**

### **Background information:**

Cornerstone Pond remains the flag ship for the FANTASTIC FISHING DAYS concept. Prior to the pond being built, Fish Orlando staff worked with contractors to “sculpt” points and drop-offs in the pond.

In 2011, the men’s ministry at the church removed exotic torpedo grass from one shoreline. Following the vegetation removal, on May 7, 2011 they conducted the first annual Cornerstone Fish-A-Thon using the existing Largemouth Bass/Bluegill population.

In 2012, at the advice of Fish Orlando staff, they had a contractor treat the remaining shoreline with 3 treatments of rodeo around Thanksgiving. Once the torpedo grass died, a

volunteer from the church removed the rest of the torpedo grass with a Bobcat. An aquatic plant contractor was hired to keep the torpedo grass out but did a poor job. Several work days were required to pull out torpedo grass manually because the contractor was ineffective. After two years of giving the contractor a chance, Cornerstone hired Aquatic Weed Control, Inc. The pond has had 100% bank access with no aquatic vegetation problems since 2014.

In March 2013, cormorants discovered the pond just prior to the 3<sup>rd</sup> Annual Fish-A-Thon, where they ate the majority of the Bluegill as documented by an electrofishing survey. In response, Cornerstone purchased 500 Channel Catfish (approx 1-2 lbs each) from Florida Fish Farms in April 2013.

In May 2013, Cornerstone worked with Fish Florida to start a fishing camp that spanned the next 3 Saturdays after the event. Parents or mentors were required to attend the camp with the children. Participants were taught how to tie knots, cast, identify fish, etc. Each day before the camp they were allowed to fish the pond. The camp has been conducted each year since 2013.

In summer 2013, Fish Orlando staff stocked 150 ( $\geq 8$  inches) Bluegill from an area lake and used an electrofishing rig to obtain 500 Bluegill ( $< 3$  inches) as forage for the Bass in response to the cormorant devastation. A 50 lb per week feed program was instituted, and by the April 2014 event, the pond had abundant big Bluegill to go along with the catfish. In over 20 years of doing small pond management, the Fish Orlando project leader had never seen such a quick response to a management action. Local residents walking their big dogs around the pond has kept cormorants from becoming a problem to date. The feeding program of 50 lbs of feed per week has continued since 2013.

In December 2016 through March 2017, volunteers used hook and line to remove 225 catfish because they were getting too big (3-9lbs) for youth events (broken lines, poles pulled in, etc.). The pond was restocked in May 2017 with 500 (10 inch – 12 inch) Channel Catfish from Georgia Select.

In addition to conducting an annual Fish-A-Thon and fishing camp, Cornerstone has allowed fishing on their pond to Scout groups, Home School kids and their parents, as well as, the Osceola County High School Fishing Program.

All events, camps, and other user groups have achieved target fish catch rates through 2019. The one exception was the May 2019 Fish-a-thon, where post-front conditions created tough fishing.

### **Current information:**

Given the catfish stocked in May 2017 served 3 fishing seasons, in November 2019 and January 2020, approximately 100 of the larger catfish (3-4 lbs) were removed for a church wild game dinner. The original plan was to restock in April 2020. However, the stocking was postponed due to COVID19. Approximately 100 or more channel catfish will be removed in in December 2020 to make room for 500 (0.5–1.0 lb.) Channel Catfish that are scheduled to be stocked in April/May 2021 from Georgia Select Hatchery.

In January 2020, Fish Orlando staff and church volunteers removed most of a large brush pile that was left over from when the pond was originally going to be a trophy largemouth bass pond. The brush pile had been a constant source of “hang-ups” for those families fishing the pond in that area.



Unfortunately, the 10<sup>th</sup> Annual 2020 Fish-a-thon and Fishing Camp had to be cancelled due to COVID19. All involved with the program look forward to a 2021, that is COVID19 free, and includes reinstating both these activities.

Although no “official” FWC outreach event was conducted on Cornerstone Pond this past fiscal year, the Fish Orlando project leader was able to help facilitate a “Dad for a Day” event. One of Fish Orlando’s “super volunteers” (Dan Fay i.e. Faymous\_Fisherman) posted an emotional video that involved a young boy asking him to take him fishing. The video received over 7 million views which resulted in Dan being asked by “thousands” of kids to take them fishing. As a response, Dan arranged for 20 kids and several volunteers, to go fishing on Cornerstone Pond. All experienced FANTASTIC FISHING that is so typical of Cornerstone Pond.



Cornerstone Pond was the location for Dan Fay's "Dad for a Day" event. Smiles and fish were in abundance.

### **St. Cloud Barrow Pit Pond (Approximately 30+ acres)**

#### **Background information:**

The St. Cloud Barrow Pit Pond was stocked in January 2015 with 500 Channel Catfish from Florida Fish Farms. The city of St. Cloud began a feeding program where the fish were fed a 50 lb bag of feed per week, and hired contractors to mechanically remove nuisance torpedo grass that made landing fish difficult. The shoreline has been maintained by aquatic plant contractors. The feed and vegetation program remain in effect to date.

An event in March 2015 achieved target fish catch rates with well over 150 people attending. During summer 2015 the kids in summer camp fished the barrow pit each week. Unfortunately, the spring event in April 2016 was preceded by a rare cold front and the event in April 2017 was held at 9 am in the blazing sun. Despite decent attendance (100 people per event), less than 50 catfish were caught on each occasion. The city of St. Cloud Parks & Recreation also held public family fishing events in the fall of 2015 – 2017 but catch rates and

attendance were not documented as Fish Orlando staff was not able to attend due to other work duties.

In April 2018, Fish Orlando staff investigated reports that an otter was in the pit, but no otter signs were found. Fish Orlando staff observed a fish feeding to make sure the catfish were still viable.

An additional 500 catfish were stocked from Georgia Select Hatchery in May 2018 to make up for natural and hooking mortality. During the stocking, Fish Orlando personnel documented a fish kill of Armored Suckermouth Catfish and Tilapia caused by a colder than normal April. The kill did not impact Channel Catfish abundance.

The event in August 2018 was held early in the morning and target catch rates were achieved by the approximately 75 participants assisted by Orange County Teen Sport Fishing Association teens. An alligator was noticed around the fish feeding areas, so FWC alligator trapper information was provided to the Park staff. The gator was removed. Due to change in park leadership, there was no event in 2019.

**Current information:**

The city of St. Cloud Parks & Recreation and the Fish Orlando program held another St. Cloud Barrow Pit event on March 7, 2020. Bass Pro Shops Orlando provided the bait free of charge, and the Teen Sport Fishing Association supplied the volunteer help. Despite extremely cold weather (night temperatures were in the 40's), 70 kids caught 45 channel catfish. St. Cloud parks leadership was approached to see if the 2021 event could be held in May, which is a month that usually has stable weather conditions.

The Fish Orlando program tried to facilitate Osceola County High School Fishing Program using the Barrow Pit for some of their events. Unfortunately, because the pit is located at the site of the former St. Cloud City Dump, liability issues associated with holding events without City presence kept the partnership from materializing.



St. Cloud Barrow Pit FANTASTIC FISHING DAYS (March 2020)

### **Toho Marine Pond (< 1 acre)**

#### **Background information:**

The owner of Toho Marine approached the Fish Orlando project leader in 2018 with the desire to make the pond on their property into a Largemouth Bass/Bluegill FANTASTIC FISHING DAYS unit. An electrofishing survey was conducted in April 2019 which revealed low densities of resident Largemouth Bass/Bluegill in all size ranges, and a large number of stocked small Bluegill/Golden Shiners purchased by a private company. In June 2019, a rough work plan was drafted with step by step instructions on how to achieve what the owner desired.

#### **Current information:**

In March 2020, 100+ large ( $\geq 8$  inch) bluegill were electrofished from an area lake and stocked into the pond. Additionally, during the same month, a fish feeding program was initiated (50lbs per month), as many intermediate ( $< 5$  inch) bluegill were removed as possible, and the dense torpedo grass surrounding the entire pond was treated with herbicide.

Plans include installing an aeration system, stocking a few more 12 inch – 14 inch bass to control the intermediate bluegill, and building a small fishing pier. Additionally, the owner intends to open the pond several times during the year for families to fish.



Osceola Teen Angler “Kinsey” helped Fish Orlando stock the Toho Marine Pond

## **FISH ORLANDO OTHER WATER BODIES**

### **Overview:**

Fish Orlando OTHER WATER BODIES receive some attention, but to a much lesser extent than the BIG WATERBODIES, FAB FIVE, FANTASTIC FISHING DAYS and URBAN PONDS. Some like Shadow Bay Park stay on the “radar” because they were a former FAB FIVE, while others get some priority due to requests from our partners.

### **Lake Baldwin (225 acres)**

#### **Background information:**

Lake Baldwin is a 225-acre lake that has a public boat ramp in Baldwin Park. While the location is primarily known for its large dog park, the city of Winter Park has made the lake a “no wake” zone, so it is popular with the Orlando sailing club, kayakers, and small boats with a trolling motor.

Over the past decade FWC habitat and species personnel have planted bulrush (buggy whips), cypress trees, and other beneficial plants. The FWC Invasive Plant section coordinates Grass Carp stockings and herbicide treatments to control hydrilla. The result is excellent bass fishing with abundant eelgrass dropping off into deep holes, in water clear enough for good night fishing.

A couple years ago we were asked by the city of Winter Park to make Lake Baldwin into a Fish Management Area (FMA). In FY 17/18 signatures were obtained by the city of Orlando and city of Winter Park lakes managers. In FY 18/19 Tallahassee leadership sent the document to the FWC legal department.

#### **Current information:**

The FWC legal department required new signatures for the Fish Management Area Agreement given the amount of time that passed between their review and the signatures from the two cities. Unfortunately, due to COVID19, the document is currently on hold within the city of Orlando until they can present it at a commission meeting. Both the city of Orlando and the city of Winter Park have assured Fish Orlando that they are 100% behind the action of making Baldwin an FMA.

### **Bithlo Park Pond**

#### **Background information:**

Bithlo Park is another body of water that is part of our work due to a request from Orange County Parks. At the request of Fish Orlando, Richloam Hatchery stocks 2,000 Channel Catfish prior to their annual Bithlo Park “Fish for Fun” event which began in September 2013. Due to excessive workload in September, Fish Orlando staff is not able to attend the event, but in addition to providing stocked fish, they have also donated rods/reels.

**Current information:**

On September 24, 2019, Richloam hatchery stocked 2,000 channel catfish into the Bithlo Park Pond in anticipation of the 7<sup>th</sup> annual “Fish for Fun” event held September 29, 2019. The event reportedly had 200 participants.

**Blanchard Park****Background information:**

Blanchard Park is located off Dean Road and the Little Econlockhatchee River runs through its property. Part of the river in the park is channelized and the part below the dam is natural. It is known for its excellent Redbreast Sunfish and Spotted Sunfish action in the tail waters right below the dam, and in the natural section of the river. Each year during the first Saturday in September, the Fish Orlando project helps Orange County Parks and Recreation host the Blanchard Park “Fish for Fun”; which may be the longest running fishing event in Florida.

**Current information:**

On September 7, 2019, Fish Orlando staff helped Orange County Parks host the 30<sup>th</sup> annual “Fish for Fun” event at Blanchard Park. The event had 258 participants, and 135 kids caught 82 fish.

**Shadow Bay Park****Background information:**

Shadow Bay Park has 3 fishing ponds in the property, but the focus is Lupine Pond (7 acres). The pond’s Channel Catfish are protected by a 30inch minimum size one catfish bag limit. The park personnel purchase and feed the catfish 150lbs of feed per week with the goal of growing 500 catfish in the pond to an average of at least 4 lbs. The catch rate goal is one catfish per man-hr of fishing. An aeration system ensures that there is enough oxygen for the fish.

**Current information:**

On September 29, 2019, a fish feeding was observed, and a hook and line survey was conducted. Only one or two catfish came up to feed, and management objectives were not achieved.

After talking to Shadow Bay Park staff, we found out that poachers had used cast nets on Lupine Pond. On May 2, 2020, 500 channel catfish (1lb each) were stocked by Georgia Select Hatchery. Just prior to the stocking, FWC law enforcement and park staff were notified to be on “high alert” for poaching. A follow up in June 2020, indicated the catfish were feeding and not being poached. Hopefully, management objectives will be reached in the 2020 survey.

## FISH ORLANDO URBAN PONDS

### Background information:

The Fish Orlando URBAN PONDS are managed for beginning fishermen and those that wish to eat their catch. The four URBAN PONDS are **Barnett Park** (4.5 acres; Orange County), **Bear Creek** (7 acres; Orange County), **MLK Jr. Park**-formerly Lake Island Park (5.5 acres; city of Winter Park) and **Lake Santiago** (4.5 acres; city of Orlando).

They are primarily put and take fisheries that are stocked once to three times per year depending on fish availability and angler harvest. Channel Catfish are stocked in the fall and spring. Grow out (8 inch – 17 inch) domesticated feed trained Largemouth Bass are stocked in the fall, and sometimes in the winter. Multiple studies have shown that hatchery raised bass have poor long-term survival in the wild due to their inability to avoid predation, however, in the case of the URBAN PONDS, they provide one to two months of very good action before they succumb to birds or the “frying pan”.

Since becoming part of the Fish Orlando program, all four have undergone projects to create good bank access, install aeration systems, create two “Baited Fishing Areas” marked with signs, and construct an informational kiosk summarizing regulations and Fish Orlando information. They are all located in safe parks where the young people have other activities to occupy them if they tire of fishing. Our partners pay for the maintenance/electrical bills associated with the aeration and the management of the aquatic vegetation. They are visited monthly by our Fish Orlando OPS staff to receive a bait block at each “Baited Fishing Area” sign, and make sure the vegetation, aeration systems, kiosks, etc. are all “in good shape”.

Over the years we have tried electrofishing, baited hoop nets, and hook and line sampling to do our pond’s fisheries evaluation. We found that the most accurate and cheapest way to do assessments was hook and line. For our fall stockings, thanks to Orange County Parks and Recreation and city of Winter Park Parks and Recreation, three of the four URBAN PONDS are the site of a fall Family Fishing Events (Barnett and Bear Creek “Fish for Fun” events; MLK Jr. Park “Test the Waters” event). We staff the events and record the number of fish caught and the total number kids fishing. For our spring stockings, good fishermen fish each pond with chicken liver for at least 2 hrs under ideal conditions. The fall goal is one fish caught per child. The spring goal is 3 channel catfish caught per hour per person.

### Current information:

In the 2019, fall family fishing events were held at Barnett Park, Bear Creek Park and MLK Jr. Park. All three waters achieved fall management objectives: **Barnett** – 75 kids; 70+ Channel Catfish caught, **Bear Creek** – 100 kids; 100+ Channel Catfish caught; **MLK Jr** – 50 kids; 200+ Channel Catfish. All three were stocked by the Richloam Hatchery with approximately 1,000 Channel Catfish/acre the week prior to the event. Like previous years, Orange County Teen Sportfishing Association, Scouts BSA, Tusawilla Bassmaster, and Winter Springs Bassmasters, provided volunteers for the events. The stocking at Barnett Park was featured on Orange County TV.

Additionally, on October 28, 2019, Richloam Hatchery stocked Barnett Park Frog Pond with 450 grow-out Largemouth Bass, and MLK Jr Park Pond with 150 grow-out Largemouth Bass. These bass ranged from 8 inches to 14 inches. Due to the difficulty in stocking these bass in the warm months of September and early October, the grow-out bass from 2019 forward will

not be stocked prior to the early fall Fish Orlando events, but rather, once the water cools in late fall.

For the second straight year, the Welaka Federal Fish Hatchery provided an additional 100 bass/acre for Barnett Park and Bear Creek in January 2020. Because grow out Largemouth Bass provide one to two months of very good action before they succumb to birds or the “frying pan”, the grow out bass that were stocked in October 2019 in the Barnett Park Frog Pond were no longer in the pond to compete with the fish stocked in January 2020.

Thanks in part to the generosity of Orange County, three of the four URBAN PONDS received May 2020 stockings of Channel Catfish purchased from Georgia Select Hatchery. A 2020 library expansion project resulted in the MLK Jr Park Pond being drained prior to the when it would have received the spring Channel Catfish stocking. Once the pond is refilled, there are plans in place for the city of Winter Park to purchase catfish from Georgia Select and restock the pond. All URBAN PONDS that were stocked in May 2020, met management goals (3 catfish/man-hr) in the spring evaluation (see table below).



<i>Urban Pond</i>	<i>Effort (angler-hrs)</i>	<i>CCF Catch</i>	<i>Exp. Angling CPE</i>
Barnett Park	2	25	12.5
Bear Creek	2	20	10.0
MLK Jr. Park	Pond Dry	Pond Dry	Pond Dry
Santiago	2	27	13.5

## OTHER OUTREACH ACTIVITIES

In addition to outreach related to Fish Orlando waters, the Fish Orlando project is involved in other promotional activities. Like the previous 7 years, it helped coordinate and promote the statewide TrophyCatch program (TrophyCatch.com). This fiscal year included presentations to the Solavita Fishing Club and the Apopka Rotary. We also helped with the July 2019 display at ICAST (largest tackle trade show in the world put on by the American Sportfishing Association) and helped organize the “Bass to Birdies” golf/fishing tournament spearheaded by Florida



Sportsman Magazine at the Rosen Shingle Creek Golf Course. Unfortunately, due to COVID19, many of the TrophyCatch promotions scheduled in March – June 2020 (Bass Pro Shops Statewide Spring Classics, TrophyCatch weekends at statewide Bass Pro Shops, bass tournament weigh-ins, etc.), had to be cancelled.

Bass Pro Shops Orlando is an integral sponsor and partner of Fish Orlando. They provide Tracker Grizzlies for the Turkey Lake boat loaner program. They also house a Fish Orlando kiosk that plays the Fish Orlando video and holds Fish Orlando Fishing Maps.

Additionally, the store sets up an in-store catch and release pond associated with various promotional Bass Pro weekends where the Orange County Teen Sport Fishing Association volunteers helps families catch their first fish.

Unfortunately, due to COVID19, all the promotional activities that Fish Orlando normally assists with (Feb/March 2020 Spring Classic, fish for the “Go Outdoors” weekends in

May/June 2020, etc.) had to be cancelled. However, in March 2020, the Fish Orlando team did provide redear sunfish and black crappie that completed the restocking of the Bass Pro Shops Orlando aquarium.

### Social Media:

The Fish Orlando goal is to provide and promote convenient quality fishing opportunities in the greater Orlando area. In addition to outreach events, we promote Fish Orlando through articles in magazines, appearances on TV, kiosks, fishing maps, videos, brochures, a Fish Orlando app, quarterly fishing forecasts, a Fish Orlando web page, presentations and displays, and lectures on top of the aquarium at Bass Pro Shops Orlando. However, the Fish Orlando team recognizes that we live in an era of social media. Therefore, we encourage you to find this fiscal year’s Fish Orlando posts on the Division of Freshwater Fisheries Management’s **TrophyCatch Face Book** page and Instagram site (**FishReelFlorida.com**). This fiscal year, the Fish Orlando program was also mentioned in the city of Orlando Parks & Recreation, Twitter, and Face Book page.