



Strategic Plan as of 2020

Vision

The Trout Lake Nature Center (TLNC) strives to be a sustainable nature center that provides nature-based environmental education to the community—children, adults and families—within Florida.

Mission

Trout Lake Nature Center's Mission is to conserve and protect the natural environment and educate the public about its importance.

Core Values of TLNC

TLNC incorporates the following core values into its programs for children, adults and families:

- Connect people to the environment.
- Create a sense of wonder and awe for the environment.
- Put nature in your hands through hands-on experiences.
- Create awareness and give knowledge through quality interpretation and education for all ages
- Show how to connect with the environment everywhere or right here, right now.
- Provide respect, community, diversity and honesty among those involved with TLNC.

TLNC has served the central Florida community and environment through nature-based education, awareness and resource conservation since 1988 when its original property was purchased through community efforts. Additional lands granted by a conservation easement from the City of Eustis created the current boundaries of TLNC.

Based in Eustis, FL, TLNC is a member and visitor supported, non-profit 501(c)(3) corporation. Funds from donations, program fees, fundraisers, grants and a loyal membership are what keep the property open and programs going.

TLNC is governed by a board of directors with the able assistance of an executive director. A staff of two, assisted by a strong volunteer force, maintains facilities, habitats and programs.

Over the years, TLNC has accomplished much with limited resources. As an independent non-profit, there is no consistent source of income. Resources become scarce in times of economic fluctuations or other crises. TLNC strategic plan attempts to direct efforts efficiently so they have the maximum impact.

Strategic areas where TLNC staff and volunteers will concentrate on improving in the next three years are:

1. Funding
2. School Connections
3. Program Expansion
4. Maintenance and Operations
5. Staffing

Year 1	Year 2	Year 3
Funding Strategies		
Develop marketing materials for endowment, end-of-year, IRA Charitable Giving, etc.	Develop tree canopy fundraiser.	
Develop annual giving campaign including end-of-year giving.	Develop party rental programming and market	
Use technology to help donor make donations more easily.	Look for additional ways to diversify funding sources.	
Develop fundraising support to help determine the most effective use of time and resources for the return.	Build up TLNC’s reserves after corona crisis is over.	
Have Board members become more vital to fundraising efforts by: <ul style="list-style-type: none"> • Becoming 100% cash giving Board. • Bringing in at least two additional donors. • Bringing in at least 2 additional TLNC members. 		
School Connections		
Attend school board meetings regularly.	Reinstate school district funding for TLNC field experiences	Pursue grant funding to support PD opportunities.
Give presentation to school board on value of nature-based education and TLNC programs before end of TLNC fiscal year.	Provide School Board with TLNC’s Annual Report	Expand PD workshops to include summer STEM Institute.

Look for ways to promote TLNC to the regional and state education community.	Introduce School District staff to TLNC's professional development (PD) such as Project WET	Look for partners to share the burden of conducting week-long training.
	Submit for EPA Education Grant to support PD training	
Program Expansion		
Develop NatureRx program	Begin implementation through medical community of NatureRx	Market and implement new in-school programming to local schools.
Create Partnership for NatureRx program with local medical groups and interests.	Pilot-test additional in-school programs developed. Adjust programming based on evaluations	
Begin training for medical/park/community partners in NatureRx program	Develop party rental program that incorporates educational elements	
Develop additional in-school programming to fill the gap when TLNC is shut down for construction.		
Maintenance and Operations		
Find funding to support maintenance worker.	Expand hours for maintenance worker to three days per week.	Add janitorial worker or combine with maintenance worker.
Plan how to accomplish additional maintenance tasks generated by new construction and facilities.		
Staffing/Volunteers		
Determine position needs for future and if volunteer or paid positions.	Look at long term staffing needs—Resource development, volunteer coordinator, office manager/bookkeeper, and education.	Find funding sources to support staffing needs.
		With funding secured, begin recruitment of key staff.

Justifications

Funding: As with many non-profits, it is important to diversify funding so the organization can weather changes in the local, regional or national economy, political support and loss of donors. Currently, a large portion of TLNC's funding is dependent on government support and small grants. Its donor base consists of primarily small donors with significant donations limited to its Capital Campaign. TLNC needs to develop programs that generate revenue and eventually consider instituting entry fees.

School Connections: With the advent of a new school superintendent and shifts in school priorities caused by active shooter programs, hurricane damage, and backlog of maintenance needs, district support for schools to attend field trips was eliminated pushing back program fees to the individual school or parent. With the COVID-19 crisis, school and district funds and time were not available to support field trips. Therefore, it is important to develop alternative programming for schools other than on-site field trips.

TLNC needs to create a dialogue with School Board members, Superintendent and district staff to develop an understanding about the importance of nature-based education to their students' physical and mental health and how nature-based programming can help achieve education standards. TLNC can present information on the latest research supporting the need for making nature connections at an early age and importance of school district support for its programs.

Program Expansion: As the northern portion of Lake County develops and more people move into the region, there will be a greater need for TLNC's programs and facilities. TLNC began working to expand its education complex facilities in 2017. Work on this expansion was divided into three phases with Phase One underway and site planning and permitting beginning for Phase 2.

Ongoing efforts need to be made to expand and keep relevant TLNC's interpretive exhibits and signage. Developing quality signage and exhibits will help to make TLNC a destination and encourage visitors to stay longer and return. To achieve visitor retention, exhibits need to be updated or changed throughout the year. Much of TLNC's exhibits have remained the same using old taxidermy mounts often not of the best quality and experiencing exhibit fatigue (mounts continually on display and not protected from touching, dust or fluctuations in temperature causing deterioration or invasion by pest). The majority of TLNC mounts are experiencing various stages of exhibit fatigue.

The adage—less is more—needs to be applied to exhibits and signage but TLNC currently has no curator or appropriate storage for items not in use. Signage needs improvements but also must not be visually overwhelming. TLNC's volunteer exhibit and

museum committee has made many improvements but is hampered by limited funding and knowledge.

As mentioned previously, TLNC needs to expand its programs to provide in-school presentations that are paid for by grants or program fees. Current in-school programs are conducted by a single staff member and supported by a small grant limiting presentations to 10 days per year. Additional staff and volunteers need to be recruited and trained to provide these presentations.

Inclusion of an education ambassador, would provide an enticement for the schools to include in their curriculum. Including a live animal into presentations comes with a wealth of issues such as stress on the animal, care and feeding of the animal throughout the year and seven days a week, training handlers who can bond with the animal and are sensitive to its signals and needs. Currently TLNC education ambassadors are limited to a gopher tortoise and two native snakes. As reptiles they require less intensive care. Depending on the time of year and weather conditions, these reptiles cannot be used year round for education programs without causing undue stress to the ambassador.

In addition to school programs, an equal portion of TLNC programs are directed to the community, adults and families. To draw in new audiences, programming needs to expand and be changed on a regular basis. TLNC is testing scheduling options, length of programs, different topics and formats, etc. With the current health crisis, TLNC is having many new visitors to walk its trails but needs to provide hands-off programming to engage these visitors.

Maintenance, Operations and Habitat: With the addition of roads, new parking area and buildings, there is a need for a full-time maintenance worker or contractor by the end of Phase 3 of the education complex expansion. Currently funds have been donated for a two-day a week maintenance worker through 2021 but not beyond.

Many of TLNC's maintenance volunteers are aging out and no longer capable of doing the heavier maintenance tasks required leaving a limited pool of maintenance volunteers to accomplish every day maintenance and volunteer tasks. There are only intermittent habitat volunteers available to assist with habitat challenges.

The natural areas at TLNC require constant attention to maintain trails, foot bridges (which are not ADA compliant), and board walk. Florida experiences periods of intense rainfall and vegetation growth which present hardships for maintenance and habitat efforts. Invasive exotics are well-established in TLNC's natural areas and the need for prescribe burns, forestry mulching and invasive removals is constant and growing. Staff is unable manage invasive efforts through volunteers.

Staffing: TLNC has depended on volunteers to conduct its business and programs. It is difficult

to recruit and retain the needed volunteers. In the United States, fewer and fewer people are willing to volunteer. In addition, TLNC volunteers' average age is 68 and up. TLNC relies on residents of the surrounding retirement communities and court-appointed miscreants for volunteers. Each type of volunteer presents a unique set of challenges and limitations. If TLNC expands as anticipated, volunteers will not be sufficient to accomplish its mission but are an integral part of all strategies.

A thorough understanding of staffing needs should be made using the recommendations of front-line staff and looking realistically at the demands to be created by new facilities, programs and projects.

TLNC Assets

Natural Resources

A 230-acre preserve— primarily of wetlands, mesic flatwoods and lake bottom— comprise TLNC's property. Walking trails of different lengths with some having foot bridges for access over wet areas. An over 800' ADA-compliant boardwalk crosses the marsh area to provide access to Trout Lake and its Education Dock.

Trout Lake is located in the Oklawaha basin and is part of the Harris Chain of Lakes. It has a mean surface area of 105 acres and its deepest depth is between 7 and 9 feet depending on water fluctuations in the system and depth of the muck bottom. Roughly half the lake is surrounded by natural wetlands. The remaining portion is surrounded by medium to high density residential land use and State Road 19 on the west.

Several watersheds flow on to TLNC property and join together before flowing into Trout Lake. Flow from the Altoona and Umatilla area enter the northwest portion of the property and flows along an intermittent stream under the entrance road through a cypress forest and into the lake. A secondary flow through Hicks Ditch comes from the northeast portion of the property enters the same cypress forest and then into Trout Lake. Periodically during high flows water will enter Trout Lake from the southern portion of the lake. Part of the water flows directly into the lake and part joins the stream flow before entering Trout Lake. Trout Lake's single major surface-water outlet discharges into Lake Eustis.

TLNC contains an active rookery with several thousand large birds such as cormorants, anhingas, black vultures, snowy egrets, and white and glossy ibises residing. An influx of migratory birds crowd the rookery during the winter months contributing large amounts of feces to the lake. Currently TLNC volunteers collect bottle water samples for e-coli testing and participate in the Lake County Lake Watch program to test for other parameters.

Trout Lake is an impaired water body as classified by the Tropic State Index for lakes and was included on the verified list of impaired waters for the Oklawaha Basin that was adopted by DEP Secretarial Order on August 28, 2002.

with a deep muck layer along the bottom. The Florida Department of Agriculture (FDACS) and

its contractor Watershed Technology is remove nutrients from the waters flowing down Hicks Ditch

Facilities: Buildings

The buildings at TLNC consist of a combination screened-in picnic shelter and open area for maintenance, double-wide natural history museum trailer, education building with large meeting room, two offices and small outdoor amphitheater.

The planned Education Complex expansion will:

- Replace the natural history museum and picnic shelter (used for school field trip lunches and other activity rentals)
- Provide additional office, classroom, small meeting area, outdoor restrooms and limited storage
- Relocate the parking and maintenance areas.
- Build a one-way exit road using pervious surfaces to reduce wetland impacts
- Connect to city sewers and remove septic tank systems and extend fire protection.

Note: Because new construction will be a mostly glass building with raised construction and solar panels housed on the roof along with doubling the interior road system, it will demand additional maintenance and upkeep. Since the building foot print is larger, it will increase janitorial needs or tasks.

Trails

Approximately 2.0 miles of maintained trails, foot bridges and boardwalk are found at TLNC. Trails are limited to areas that can be accessed year-round without impacting wetland habitats. There is a need for additional trails as use increases but future trails would need to be raised and ADA-compliant.

The trails that receive the most use are the Hazelton/Lazy Oak and Grandfather Oak trails. The Hazelton/Lazy Oak trails start at the southern end of the parking lot and coming together about 50' above the start of the marsh boardwalk. An approximately 800" foot bridge cross a wet area along the Lazy Oak trail. The ADA-compliant boardwalk travel across what used to be an open marsh but is transitioning into a woody wet shoreline with red maples, tallow trees, primrose and Carolina willow and other woody vegetation due to the lack of burning. This boardwalk contains a shaded area (called Dragonfly Point) approximately 75% of the way to the lake. At the end of the boardwalk is a newly built Education Dock where many different education programs take place and is typically included in most on-site visits and field trips. From this dock you can view the entire lake which includes the Trout Lake Rookery.

The Grandfather Oak Trail connects with the Adventure Trail which terminates at the Education Building. The understory surrounding the Grandfather Oak was opened using a

technique called forestry mulching and has resulted in higher use by wildlife, birds and butterflies but also invasive species. This is a favorite trail of many daily walkers and dog owners.

Other trails consist of the Armadillo and Little Armadillo trails which connect the Hazelton and Education Building. The Little Armadillo Trail is designed for use by younger students to provide an outdoor woods opportunity that does not consume too much learning time. The Armadillo Trail merges into the Little Armadillo Trail at its northern point and provides walkers with a longer trail. This trail does experience periods of wet conditions and may be impassable for part of the wet season. The Adventure Trail features a raised foot bridge and suspension bridge that crosses the cypress forest and intermittent stream. During wet conditions access to this trail might be limited. Currently, an Eagle Scout project is planned to extend and raise the foot bridge to allow better access during wet conditions. This trail is often used in education programs.

Trail Needs: One of the future projects/programs planned for TLNC is to develop a eco-therapy trail. The current crisis emphasizes the need for people to get outdoors to maintain their mental and physical health.

Programs

TLNC Education programs are designed to move visitors along an interpretive continuum that begins with simple curiosity about a resource, to beginning to care, to a place of stewardship and sense of community. Education is the heart of what TLNC does.

We wish to bring about transformations in individuals and communities that result in better stewardship of the environment and better personal and community health. This will happen through thoughtful communication and experiences that form emotional connections to our natural resources and just plain getting people outdoors.

School field trip programs are constantly updated to be collated to current Florida education science standards while allowing the best use of TLNC outdoor areas and factoring Florida weather. Florida is in the process of updating its science standards which will cause a need for TLNC programs to be adjusted to help meet new standards. There is currently no timeline for completion by the State of Florida.

With limited funding for field trips or internal restrictions to grade level field trips, TLNC needs to begin developing relevant in-school programming that will help to connect students with nature and the environment. This can be done by classroom presentation or with the right resources online videos or webinars.

As a new state co-coordinator with the League of Environmental Educators in Florida for Project WET (recently rebranded as Water Education Today), TLNC will expand its professional development opportunities for Lake County and other educators in the state. TLNC is

responsible for reactivating and creating a WET facilitator network so a Train-the-Trainer model can be used to provide quality water education in Florida. By training facilitators who train teachers water education will ripple through Florida classrooms allowing future decision – makers to learn and understand how natural and artificial water systems function, what are the water challenges facing Florida and the world, and how humans effect our water resources.

In addition to Project WET, TLNC can offer training in most recognized environmental education programs in the United States and Florida including Project WILD, Project Learning Tree, and Florida Black Bear. One of the drawbacks to educator attendance is the lack of support by the school district and competing in-service needs caused by mandates from the state and school district. Stipends for teachers attending training is also a large incentive along with recognized CEU which teachers need to maintain their teaching certification. Timing is key to success along with an interesting, relevant topic.