

EDUCATION



Robert Knight, the Florida Springs Institute's director and founder, stands next to a Silver Springs-inspired piece by Gainesville-based painter Margaret Tolbert in the institute's new High Springs home.

LOOKING TO NEW FUTURE AT 'HEART OF SPRINGS COUNTRY'

Florida Springs Institute

STORY AND PHOTOGRAPHY BY MICHAEL STONE

- ▶ **The Florida Springs Institute — a nonprofit established six years ago with the goal of rescuing the state's 1,024 springs from its increasing human population and all the inevitable side effects — is settling into its new home in downtown High Springs.**

THE 1,400-SQUARE-FOOT, TWO-FLOOR SPACE — CALLED THE North Florida Springs Environmental Center — is across from City Hall and opened its doors on April 5.

Visitors can stop by to: find out where the springs are and how to get to them on a touch-screen monitor; watch underwater videos of manatees and other captivating creatures that call the ecosystems home; read; see work by area artists, including nature photographer John Moran and springs painter Margaret Tolbert; and attend classes.

Though he said there has been a good bit of interest already,

institute director and founder Robert Knight doesn't expect a lot of foot traffic — maybe just some people stopping in on their way to the springs who might watch some videos and learn something along the way.

"We'll just go about our business and doing our work," he said of the institute's five employees, which includes himself, though his role is a volunteer one, "and then we can come and talk to people as we need to."

The building will also be the base for the institute's volunteers and intern force of two to eight annually, from the University of

Florida and elsewhere. (Knight said those wishing to apply for an internship should visit FloridaSpringsInstitute.org for contact information and that pay availability varies based on funding.)

Remodeling since the lease was signed in December — like the floors and creating an example of a low-impact garden out back — comes thanks to a grant from the Dharma Foundation. And the first year's rent was covered by Ginnie Springs Outdoors, the owner of the private Ginnie Springs along the Santa Fe River in Gilchrist County.

"The work that they do is very important ... to bring to light what is truly impacting the springs and the river," said Ginnie Springs owner Mark Wray, whose family has held the site since 1971. "I think we're very fortunate to have them choose High Springs. ... This is truly the heart of spring country here."

Knight said a main reason for the move was to show a clear separation from his private environmental consulting firm in Gainesville, Wetland Solutions, which had previously housed the institute and incubated its start.

"There are some people that have a problem ... that I have a for-profit company, and that maybe I was using that somehow [for the] Springs Institute," he said. "That's the furthest thing from the truth."

But echoing Wray's point, Knight also noted the significance of location.

"I wanted to separate [the business and the institute], but even more importantly, the reason we came here is because this is the main highway to the springs," he said. "[Highway] 27 and Main Street are really — this is the hub of the whole springs heartland of Florida.

"There's no other place in North Florida that is the center of so much springs activity."

Knight said the new facility will provide space for the institute's focus on springs science and public education. Meanwhile, the soon-to-be-incorporated Florida Springs Council — which comprises 35 different groups, like the Silver Springs Alliance and Our Santa Fe — will concentrate on advocacy, politics, lobbying and legal challenges, he added.

"So we can reach millions of people instead of hundreds of people," Knight said of targeting education.

Upcoming educational opportunities include Knight's Springs Academy Tuesdays, which started in April and will take place at noon on the first Tuesday of every month through September at the institute's new home at 99 NW First St. in High Springs.

They're free and open to the public — though there is an optional \$5 donation — and will cover a new topic each time, from the overview that was given in April to springs advocacy in September. Those wanting to participate can attend all or as many as possible, Knight said.

"I'm going to teach people everything they need to know about springs," he said.

The institute's move comes at a time that Knight characterizes as dire for the springs, which are defined as spots where water emerges from Florida's Swiss-cheese underground and stays at the surface.

"The springs are wonderful. We all love them. Nobody dislikes

the springs," he said. "But the springs are in trouble because of other decisions that are being made that have nothing to do with the springs.

"People want to make money, or they want to have green lawns, or they want to have cheap wastewater systems — and those things are impacting the springs."

Knight went down a list of problems that have been well-noted by researchers and media coverage in recent years.

Among them: The water that flows into them is continuing to be over-pumped for things like bottled water, agriculture and residential lawns. Less flowing fresh water leaves more room for saltwater deeper underground to make its way upward and into the system — or as it's more simply called: saltwater intrusion. And nitrates from cattle feces, fertilizer and sometimes human waste, like from septic tanks, are causing algae blooms that kill the fragile native vegetation and can even be harmful to the human water supply.

"The springs and river have really changed in [the last] four years," Wray said. "It's just night-and-day difference. ... You can't make this up. [The native vegetation] is just gone."

"They're screaming right now there's something wrong," he continued. "When that river's not even capable of growing hydrilla — and that's something that grows anywhere — Mother Nature's saying, 'Hey, we've got a problem here.'"

One positive note Knight offered is that it's now known that the springs have a vast economic impact in addition to their environmental ones, giving more reason to preserve them.

The study showing this — published in December 2014 by researchers at the University of Florida's Institute of Food and Agricultural Sciences — figures an estimated \$84.2 million in annual economic benefit directly from springs across nine counties in North Central Florida.

"Obviously, people come here for a healthy river and a healthy spring and high-grade, quality water," Wray said, estimating that native plant life has declined 95 percent in Ginnie Springs and the Santa Fe River over the last four years. "I get a lot of repeat customers, and they've asked, 'Where does all the aquatic life go? What's going on?'"

"And at some point, if we don't get this turned around and going at a better direction, there's going to be an impact" to the springs' economic benefit.

Also, Knight said, rain has returned following the drought in 2011 and into 2012 that had pushed some area waterways to near stagnancy.

"We've had fairly normal rain for the last two to three years — fairly normal, around closer to 50 inches a year," he said.

Another recent springs aid noted by Knight: Tallahassee spending \$220 million to modify its wastewater treatment, drastically reducing the nitrates — especially to Wakulla Springs — being put out by the city and into the water system.

Knight, who once taught springs ecology at UF, originally wanted to start the institute through the school, but there wasn't an interest because the organization wouldn't be a "big money" draw, he said.

But with the university's involvement in so many business

and agricultural matters, which can present springs problems, the institute's autonomy has allowed it to "shine bright light on the issues facing our springs," Knight said.

"It's turned out that it's good we didn't do that," he said, "because we have an independent voice for the springs that is not affected by who we worked for."

Another thing that's contributed to the independence of the institute, which runs on an annual budget of about \$100,000: no state funding.

"We're in a difficult political time right now in the state, where we're more interested in making jobs than we are environmental protection in the state, and that has led to general degradation of environmental systems all over the state," Knight said, noting the recent problem of polluted waters being discharged from Lake Okeechobee into the Caloosahatchee and St. Lucie rivers.

Knight, who has often been critical of legislative policy on the springs, explained that the institute isn't particularly popular with state officials.

It didn't support Gov. Rick Scott's 2015 announcement of putting \$1.6 billion toward springs restoration because "it didn't change anything enough to really protect the springs," he said. "It says it's going to protect the springs, but it, in fact, is more of the same. It's really the status quo."

"They've been spending more and more money each year since we started the Springs Institute on springs protection because we're raising a big fuss about what's happening to the springs," Knight added. "But the money's not been helpful so far."

Knight noted low-flush-toilet rebate programs: "Great. That's good. But can you quantify the amount of water [that's saved]? No, you can't. There's no increase in flows in the springs overall."

Paying homeowners with septic tanks to hook up to sewer lines rather than the nitrogen from waste going back into the ground: "But nobody's been successful in getting people to sign up for those when they put money out there. They'll pay the complete cost of it for a homeowner, and [the homeowner] won't sign up because they don't want to get a monthly bill from the sewer plant."

And GPS devices for farmers to know where they've already put fertilizer: "But it doesn't require them to reduce the amount of fertilizer. So it basically makes a farmer's life easier — save's him some money on fertilizer."

"We're all about restoring the springs," Knight said. "We're not about making it look like we're restoring the springs. I will pat the governor and everybody on the back forever for allocating the money, but only if they spend it and don't waste it."

Because of the education, funding efforts, research, monitoring and other various undertakings at the institute, Knight characterized the clock as also being a primary adversary of the springs.

"There's no time. We can't work [all the springs], and so we do as much as we can," he said. "And I'm trying to grow the Springs Institute up enough so that it has a life of its own."

But "it's exciting," Knight added, referring to the new location. "We're really excited about this. I hope it's our future — that we can be more visible publically." **OT**



Nature photos, like the one above of the Ichetucknee River by High Springs photographer Tedd Greenwald, and educational videos that show manatees and other springs wildlife line the walls of the institute's new location. Behind the building is an example of a low-impact garden (below).

