

Bozeman duo brings plant knowledge to your phone

BY JASON BACAJ BUSINESS JOURNAL EDITOR

NOT LONG AFTER WHITNEY TILT moved to Bozeman from Washington D.C. he was stunned to learn there wasn't a single good field guide to the area's flowers. He spent his whole professional career in natural resource conservation. Most of it was dealing with human conflict, managing disputes over water and timber, but Tilt said he's always been something of a naturalist. As such, the idea that folks wanting to expand their knowledge of plants in the Yellowstone area couldn't find a suitable field guide didn't sit well with him.

"I've always been interested in outdoor education," he said. "My kids used to call it 'Dad's Critter Camp.'"

He teamed up with the Gallatin Valley Land Trust and put together "The Flora of Montana's Gallatin Region: Greater Yellowstone's Northwest Corner," which was released last year.

Two days after the book came out a technologically inclined biologist friend of Tilt's approached him about the book.

"When are you going to do the app?" the biologist said.

"First of all, I leave my cell phone in the car when I go hiking. And second of all, I don't know anything about the technical side of apps," Tilt replied.

"Things are going to change," Tilt recalled the biologist saying. "You're going to start leaving everything else behind at the trailhead and you're going to take your phone because it's going to have your maps, your trail guides, your GPS and your camera on it."

The next day, Tilt was introduced to local software consultant Katie Gibson at Sola Café and formed High Country Apps on a handshake. They intended to take the biologist's advice and turn the field guide into an interactive mobile device.

Gibson, who worked for Hewlett-Packard in Oregon for 15 years, had decided not long before the meeting that she wanted to design a smartphone app. It was good timing, she said.

The first app was developed on Android, in part because Gibson was inspired to create an app at a Google conference and also because the Java computer language is easier to work with than Apple's operating system, she said. An Apple version came out late last fall, pushing the app out on the iPhone, iPad, Android and Kindle Fire.

The app, Flora of the Yellowstone Region, allows the user to identify wildflowers, grasses, shrubs and trees of the Montana Yellowstone region. It's defined as bounded by the Bridger and Crazy mountains in the north, the Salt River and Wind River ranges in Wyoming in the south, the Absaroka Range to the east and the Tobacco Root and Gravelly ranges in the west. The app contains information for about 330 plant species.

The two have taken the framework Gibson built for the Yellowstone app and paired with experts in other regions of the country to develop apps for their areas. One has come out for Colorado already,



one for the Wasatch range is due out soon and one for the flora of Glacier National Park is expected out in June, Tilt said.

"There's really no limit," he said. "We plan to start spreading out."

Tilt and Gibson hope for a wide age range of folks using their product. They see the smartphone app as less of an intrusion into the solitude of nature and more a way to engage a younger generation. Kids these days, Tilt says, have a love of digital media, of interactive games.

Montana State University professor and plant biodiversity researcher Matt Lavin, who helped catalogue grass species for the app, shares their vision of an engaging app for a younger generation.

"I have no philosophical or other sort of objection to that technology, I think it's outstanding," Lavin said. "This is one more resource, perhaps a very promising resource in the future as people become more used to using cell phones."

However, he believes the app won't spark people's interest in learning about the local flora so much as fan a flame already lit.

Still, the app may help bridge the gap between the digital world and the real world, something stronger than Tilt and Gibson's initial apprehension about leading more people to take their smartphones into the woods.

"If we don't have a generation that plays in the outdoors, they won't protect the outdoors," Tilt said. "We're at a crossroads here."

Jason Bacaj may be reached at jasonb@dailychronicle.com or 582-2635.