As an ambassador for the Confederated Tribes, and a role model to young ladies, Miss Warm Springs has represented the beauty and culture of the tribes.

The Museum at Warm Springs is now hosting *Royal Legacy: Honoring Miss Warm Springs of Our Past and Present.* The exhibit will be on display until September 13.

Dave McMechan/Spilyay

Around Indian Country

Last defendant sentenced in casino case

YAKIMA — A 26-year-old Toppenish man was sentenced to 11 months in federal prison last week for his role in rigging drawings at Yakama Legends Casino two years ago.

Ricardo Garcia was the last of 42 defendants to be sentenced in the case. He was among four defendants who a U.S. District Court jury found guilty in April of conspiring to steal casino funds and theft from a casino on tribal land.

The 42 were indicted for stealing $63,250 by rigging a contest the casino ran as part of its 15th anniversary celebration in 2013.

The contest consisted of a drawing to select a winner, who then would pick from one of 13 spots on a game board for a cash prize ranging from $250 to $2,500. The contest ran from February to May 2013.

Prosecutors said Juan Correa, a casino marketing employee, rigged the drawing by preselecting a winner. Garcia would then tell that person which spot to choose, usually one of the higher-value prizes. The person would then give Correa or Garcia a share of the prize money.

Garcia was also accused of recruiting people to participate in the rigged contest, according to court records.

Correa was sentenced in April to five months in prison after pleading guilty to conspiracy to steal from a casino and theft by a casino employee.

Garcia's co-defendants at the trial, Arianna Rosales, Raul Arellano and Exmeralda Garcia, were sentenced July 23. Rosales and Exmeralda Garcia were sentenced to 30 days imprisonment, while Arellano was sentenced to 45 days in custody.

Each also received three years on probation.

Of the remaining defendants, 33 pleaded guilty to theft charges earlier, with most being sentenced to probation.

Recent hot weather bad for fish

A hot summer, combined with low river flows, have brought high mortality to migrating fish.

In July, hundreds of thousands of sockeye salmon died in the Columbia River and tributaries, due to warm water temperatures. More than half of the 2015 sockeye run was wiped out by the heat wave, according to estimates.

August is expected to see continued high temperatures.

A record low snow pack in the mountains has meant little of the chilling runoff that would normally cool the waters of the Pacific Northwest.

The temperature at the Bonneville dam is 2 to 4 degrees warmer than the average over the past decade. Abnormally high river temperature increases fish metabolism and promotes disease, both of which cause death.

The Columbia River's sockeye salmon are not the only species facing high mortality rates. Oregon fisheries biologists say more than 100 spring chinook died in July in the Middle Fork of the John Day River, when water temperatures hit the mid-70s.

Oregon and Washington both enacted sport fishing closures due to warm water, and sturgeon fishing in the Columbia River upstream of Bonneville Dam was halted after some of the large, bottom dwelling fish started turning up dead.

Management teams tried to cool flows below 70 degrees by releasing cold water from selected reservoirs.

The fish become stressed at temperatures above 68 degrees, and stop migrating at 74 degrees.

In Idaho, an emergency declaration in July allowed state fisheries managers to capture endangered Snake River sockeye destined for central Idaho, and take them to a hatchery to recover in cooler water.

Extension tour focus on produce

Sara Rogers/OSU Extension

Fruit Loop tour participants stop for a rest.

Warm Springs Oregon State University Extension in July hosted a tour of the Hood River Valley Fruit Loop.

Donations from Power and Water Enterprises and Composite Products helped to cover the costs of the vans and fuel.

Over 15 participants, traveling in two tribal vans and several personal vehicles, made the trip to purchase fresh produce.

The group stopped at four different orchards, and the tour participants were able to acquire several varieties of cherries, apples, corn, squash and apricots, among other fruits and vegetables.

The following day Oregon State University Extension held a canning class to demonstrate how to make and can apple sauce.

Another Fruit Loop Tour is planned for September 17.

The September group will travel to Kimberly to obtain peaches, pears and other fall produce. If you are interested in attending, please call the Extension office at 541-553-3238 to reserve a spot, first come first serve.

Study finds chinook hatchery rebuilds population

Hatcheries are an effective tool for rebuilding spring chinook abundance and productivity in the Yakima Basin without impacting wild fish.

That is the finding of the latest research published in the scientific journal *North American Journal of Aquaculture*.

The study is based on 33 years of planning and research.

The research shows that the Cle Elum Supplementation and Research Facility increased fish spawning in the Yakima Basin, while unsupplemented populations continued to struggle.

The Cle Elum study results refute commonly held beliefs that hatcheries hinder naturally returning populations, and that natural-origin populations will rebuild in highly altered river systems in the absence of hatchery programs.

The research found that salmon redds increased in the Upper Yakima River by 120 percent with supplementation, while the number of redds increased 47 percent in the unsupplemented Naches River.

During the same time frame, natural-origin returns in the Upper Yakima River increased 14 percent with supplementation, while natural-origin returns in the unsupplemented Naches River decreased by 12 percent.

No pathogens or disease interactions between natural-origin and hatchery origin populations were detected and ecological interactions were largely neutral.

"Our results demonstrate that natural spring chinook populations were maintained or increased in the supplemented Upper Yakima River, while the adjacent un-supplemented population in the Naches River continues a slow but steady decline," said Dr. Dave Fast, senior research scientist for the Yakama Nation Fisheries program.

Dr. Fast is the lead author of the publication.

"Habitat restoration is occurring in both subbasins and these results indicate that we cannot rely on habitat restoration alone to achieve recovery," he said.

"We need both continued supplementation and expansion of habitat restoration actions to keep pace with the ever-increasing threats these fish face for their survival."

The Cle Elum Spring Chinook Supplementation and Research Facility was conceived in the 1980s as a harvest mitigation program.

By the 1990s, that goal was broadened to a hatchery supplementation program that would increase harvest opportunities, increase natural spawning on the spawning grounds, and provide research that could address critical issues in hatcheries.

The resurgence of spring chinook in the Yakima Basin has substantially increased fishing opportunities after a 40-year absence, significantly improved relationships, and increased opportunities for partnerships.

"This innovative project began as a dream of our elders to return fish runs that were damaged," Sam Jim Sr., chair of the Yakama Tribal Council's Fish and Wildlife Committee.

"While many criticize tribal supplementation efforts, failure to increase fish populations is not an option. Our current situation requires us to act for the survival of our fish as well as the survival and well-being of our tribal communities, tribal culture, and our traditional foods."

Populations in the Columbia Basin continue to face problems of loss and degradation of freshwater habitat, and significant juvenile outmigration mortality associated with the hydrosystem.

The tribes have argued that supplementation programs that incorporate wild fish as broodstock into their hatchery programs and place fish back in to their natural spawning areas are important to recovery.

The American Fisheries Society is offering free access to the paper through August 31.

The paper can be downloaded via:

fisheries.org/special-section-hatcheries-and-management-of-aquatic-resources-hamar