

NATURALLY SOUTH OKANAGAN

PRESS KIT 2018



QUICK FACTS

THE WINERY: Tinhorn Creek Vineyards

YEAR ESTABLISHED: 1993

FIRST RELEASE: 1994 – Pinot Gris and Chardonnay, Pinot Noir and Merlot

LOCATION: Road 7 and Highway 97, Oliver, British Columbia

WINEMAKER: Andrew Windsor

ASSISTANT WINEMAKER: Korol Kuklo

VITICULTURIST: Andrew Moon

GRAPE VARIETIES: Gewürztraminer, Pinot Gris, Chardonnay, Semillon, Sauvignon Blanc, Viognier, Muscat, Cabernet

Franc, Merlot, Pinot Noir, Syrah, Cabernet Sauvignon, Malbec, Petit Verdot, Roussanne

WINES: The Creek, Tinhorn Creek Oldfield Reserve tier and Tinhorn Creek Varietal tier

50% red and 50% white wine production

35,000-40,000 cases annually

1,100 oak barrels; mixed American, Hungarian and French

100% Vintners Quality Alliance (VQA) approved

OWNERSHIP: Andrew Peller Limited is a leading producer and marketer of quality wines in Canada. With wineries

in British Columbia, Ontario, and Nova Scotia, the Company markets wines produced from grapes grown in Ontario's Niagara Peninsula, British Columbia's Okanagan and Similkameen Valleys, and from vineyards around the world. The Company's products are sold predominantly in Canada with a focus on export sales for Ice-wine and personal winemaking products. More information about the Company can be found at www.andrewpeller.com. Andrew Peller Limited common shares trade on the

Toronto Stock Exchange (symbols ADW.A and ADW.B).

WINERY: Opened May 1996; 836m² production facility, 279m² tasting room/admin, 465m² barrel cellar, 231m²

admin building, 371m² restaurant.

VISITOR EXPERIENCE: Winery tasting bar and wine shop

Miradoro Restaurant, Vancouver Magazine: GOLD Best Winery Restaurant 2017, 2016, 2015, 2014,

2013, 2012. Georgia Straight Golden Plates Reader's Choice Winner 2017, 2016.

Canadian Summer Concert Series

Self-guided tour, barrel cellar and vineyard tours

Golden Mile hiking trail

Gourmet snacks and picnic area

Special winemaker events and activities



CONTACTS

WINERY ADDRESS

Tinhorn Creek Vineyards

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MEDIA CONTACT

Director of Sales & Marketing Jan Nelson jan@tinhorn.com





TIMELINE

1993	Kenn and Sandra Oldfield, Bob and Barbara Shaunessy purchased the first 80 acres of Tinhorn Creek Vineyards and established the winery.	2014	New winemaker announced. After 20 years, Sandra Oldfield passes the torch to Andrew Windsor. Tinhorn Creek's approach to winemaking has always been collaborative and Sandra continues the tradition by running the winery as CEO
1994	Initial vintage is released with 1,200 cases of wine – Pinot Gris, Chardonnay, Pinot Noir and Merlot.		& President whilst working together with her successor Andrew and the winemaking team.
1996 2001	Winery opens to visitors in May of 1996. 1,115 m ² winery that includes a tasting bar, wine store and gift shop. It also houses the production facility, barrel cellar	2014	Tinhorn Creek Vineyards celebrates its 20 th year producing top quality wine by hosting 20 events.
	and administration offices. Awarded Canadian Wine Awards' "Red Wine of the	2014	Tinhorn Creek along with other wineries on the Golden Mile Bench submit a proposal in May to become the Okanagan's first sub-DVA (Designated Viticulture Area).
	Year" for the 1998 Merlot.	2014	
2002	Opened 465 m² barrel cellar, home to over 1,100 barrels.	2014	Tinhorn converts from overhead irrigation to drip irrigation, reducing water usage by 70%.
2004	To celebrate their 10th-anniversary Tinhorn introduced Oldfield Collection Merlot.	2015	Recognized by the Ministry of Agriculture, the "Golden Mile Bench" is the first official sub-DVA (Designated Viticulture Area) in BC.
2004	Introduction of the twist-off closure Stelvin screw top.	2016	Tinhorn Creek's first Golden Mile Bench wines are
2005	Bottled our 200,000th case of wine.		released; varietal Gewürztraminer and Oldfield Series Chardonnay.
2007	Released first Syrah (2004) with 50 cases. Tinhorn Creek Vineyards becomes Canada's first carbon neutral winery. Tinhorn Creek Vineyards adds to its sustainability practices by becoming the first Canadian winery to complete the Climate Smart program and	2016	Tinhorn Creek Vineyard's CEO Sandra Oldfield named one of Canada's most powerful women as a Top 100 winner in the Sun Life Financial Trailblazers & Trendsetters category of the Women's Executive Network's (WXN).
	offset their carbon footprint.	2016	Tinhorn Creek Vineyards was awarded the CSE Gold medal for Canada's Safest Employer 2016 (Hospitality Category).
20102011	Two new wines released in the Oldfield Series, 2Bench Rosé in June and 2Bench Red in October. Miradoro Restaurant opens in April featuring a market	2017	Awarded Double Gold at San Francisco International Wine Competition for 2013 Oldfield Series 2Bench Red. And
	cuisine menu with a Mediterranean influence created by award-winning Chef Jeff Van Geest. The wine list features Tinhorn Creek wines as well as a selection from	2017	Double Gold at All Canadian Wine Championships for 2014 Cabernet Franc.
	other BC wineries.		Tinhorn Creek introduces new Flagship wine, The Creek. Oldfield Series wines rebranded as Oldfield Reserve and Varietal wines labels redesigned. Innovation tier launched, focusing on experimentation in the vineyard and cellar.
2013	Named as one of the top 10 brands of 2012 by Wine Business monthly. The 2011 Oldfield Series 2Bench Rosé earns top 10 wines of 2012.	2017	Tinhorn Creek Vineyards ownership changes from Oldfield and Shaunessy families to Ontario-based family run Andrew Peller Limited.
2013	Released first Oldfield Series Cabernet Franc (2010).		
2013	Salmon Safe Certification acquired.		





TINHORN CREEK VINEYARDS

On a hillside overlooking vineyards, sagebrush, and the old mining creek that is its namesake, Tinhorn Creek Vineyards has been owned and operated by the Shaunessy and Oldfield families since 1993. The winery is located south of Oliver, BC, at the junction of Highway 97 and Road 7 on the famed Golden Mile Bench wine-growing district. This area is named for its rich history of farming and dates back to the early 1900s. In 2015, the Golden Mile Bench was officially designated as British Columbia's first sub-appellation (designated viticulture area) in recognition of the area's unique terroir and high quality.

Situated in the south-central interior of British Columbia, the Okanagan Valley lies in a rain shadow between the Coastal and Monashee mountain ranges. The lack of precipitation combined with a warm climate makes it one of the warmest and most arid places in Canada. Imposing mountain ridges and a chain of freshwater lakes play host to orchards and vineyards and spectacular natural sage and grass-covered terrain.

Tinhorn Creek Vineyards spans 150 acres of prime agricultural land on two very distinct benches. This land lends to the creation of terroir-driven wines that are classic illustrations of the place they are grown. The 100-acre Diamondback Vineyard on the Black Sage Bench is planted with a mix of red and white varieties, primarily Pinot Gris, Merlot and Cabernet Franc. The 50-acre Tinhorn Creek Vineyard on the Golden Mile Bench is also planted with a mix of grapes, primarily featuring Gewürztraminer and Pinot Gris.

The winery produces wines in two tiers; Varietal and Oldfield Reserve tiers. The single-varietal series includes a Gewürztraminer, Pinot Gris, Chardonnay, Cabernet Franc, Pinot Noir and Merlot. Special lots are selected each year for the winery's reserve tier, named the Oldfield Reserve. This tier is a playground for experimentation and is a creative showcase of the best wines from each vintage. The reserve line-up includes 2Bench White, a proprietary blend, as well as a Rosé, Merlot, Syrah, Pinot Noir, Cabernet Franc and a Golden Mile-designated Chardonnay. The Oldfield Reserve red wines are aged for a minimum of three years prior to release. All Tinhorn Creek wines evoke the unique terroir of the region: the sage-covered desert terrain.



HISTORY

A RICH MINING HISTORY

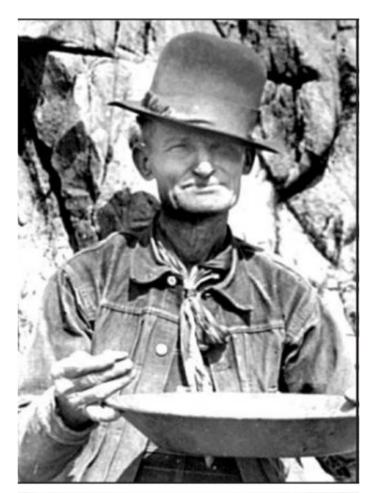
The south Okanagan has a history of gold and silver mines that date back to the 19th century. Tinhorn Creek Vineyards takes its name from the creek that runs above the property and an historic mining site that drew miners hopeful of making a quick fortune. The site still draws interest from current day miners. The Tinhorn mine claim site is located on the north side of Tinhorn Creek, 5 km southwest of Oliver, BC. It lies along the southern edge of the historic Fairview mining camp.

The Tinhorn, Big Horn and Fortune claims were owned and operated by the Tinhorn Quartz Mining Co, and staked in 1896 on a vein of quartzite. It has been recorded that 274 tonnes from which 1400 grams of gold and 467 grams of silver were recovered was produced from the Tinhorn mine site. Most of the gold was recovered in 1898, with the remaining ore recovered in 1910, most likely from the old stamp mill tailings.

While visitors to the area today are unlikely to strike gold, a rich experience awaits at the winery and the surrounding Golden Mile hiking trail that traverses past the old mine site.

TINHORN CREEK VINEYARDS HISTORY

The original owners of the three properties at the Tinhorn Creek site were Walter and Martha Reid. They moved to the site in the 1960s, and after much earth moving, developed the land into vineyard. When it came time for Walter to retire, he subdivided the property into two large vineyards, and retained some acreage to work on during his retirement. Tinhorn Creek purchased one of the vineyards, a 25 acre parcel of land, from Terry and Halina Wells (Terry was a schoolteacher at South Oliver Secondary School and built the house in which Sandra and Kenn Oldfield reside). The other vineyard was first sold to Peter Serwo (founder of Golden Mile Cellars, recently renamed Road 13 Vineyards), who sold it to Hans Fischer, who then sold it to Tinhorn Creek's owners. Hans Fischer stayed on as Tinhorn Creek's vineyard manager until retirement in 2003.







VINEYARD PROFILES

DIAMONDBACK VINEYARD ON THE BLACK SAGE BENCH

Tinhorn Creek's 100-acre Diamondback Vineyard located on the Black Sage Bench. Black Sage Bench is home to approximately one-third of the Okanagan Valley's vineyards. This area was first planted with hybrid grape varieties which were later removed in 1988 as a result of NAFTA under a government program to replace less desirable grape varieties with premium vinifera grapes. The land sat fallow for several years before replanting began. Twenty minutes north of Osoyoos, the Black Sage Bench sits on top of sandy soil that can be up to 300 feet deep. Affectionately known as "The Beach", the soil on the upper elevated area of Black Sage Bench makes planting a challenge as freshly dug holes immediately fill with sand. The soil has lower nutrient and organic matter content than other areas in the valley, and there is a high evaporation rate as water drains right through the soil, requiring more irrigation than other sites. Fortunately, the benefits outweigh the challenges, which is apparent in the quality of the grapes the area produces.

The Black Sage Bench is a protected ecological habitat that preserves antelope-brush, bunchgrass, sage and prickly pear cactus. These plants are critical habitat for the survival of several animal species, including the burrowing owl, tiger salamander, sage thrasher, pacific western rattlesnake, night snake, and badger. Today, the Black Sage Bench is planted primarily with vinifera grapes and is one of the most important viticulture regions in the Okanagan Valley. Its changeable microclimate makes for completely different grape ripening conditions from the rest of the valley.

The Diamondback Vineyard has a southwest facing elevated location and enjoys both early morning and late afternoon sun. In the summer months, the site can get two to three additional hours of sunlight per day compared to the Tinhorn Creek Vineyard. The grapes planted at this site can ripen one to three weeks prior to the same varieties at Tinhorn Creek, in part due to this extended sun exposure.

The Diamondback Vineyard has 100 acres planted with eight varietals. Planting began in 1994 with Pinot Gris and Cabernet Franc. More plantings followed including Merlot, Pinot Noir and Chardonnay. By 1997, the Diamondback Vineyard planting finished. More recently, Semillon, Syrah and Cabernet Sauvignon have been planted at this site.





TINHORN CREEK VINEYARD ON THE GOLDEN MILE BENCH

The 50-acre Tinhorn Creek Vineyard in the Golden Mile Bench sub-appellation; the Golden Mile Bench starts at Fairview Road in Oliver and extends south to Road 13. Although this area measures longer than a mile, it was first referred to the "Golden Mile" in the mid-1940s as it gained its reputation for its rich farmland.

In the late 1910s, the area was divided into plots for soldiers to farm upon returning from World War I. An open irrigation canal ("the Ditch") that was completed in 1929 between Vaseaux Lake and Osoyoos turned the arid land into a lush area suitable for ground crops and tree fruits in the mid-1930s. At the same time, an old mine site reopened and the area enjoyed an economic boom. The reputation of this farming community combined with the area's history of gold and silver mining led to the area's name "Golden Mile". The area became a highly desirable viticulture site beginning in the late 1960s when vineyards were first established here.

The Golden Mile Bench is located on a bench above the valley floor, and the elevation makes it significantly warmer than the valley floor. These features also help the vineyard escape damaging spring and fall frosts. The Tinhorn Creek vineyard site enjoys the early morning sun exposure. By late afternoon, the sun dips behind the hills and providing cool summer evenings, allowing grapes to develop their exquisite flavours. To the west of the vineyards lies the Thompson Plateau. The sun goes behind this ridge early in the day relative to the other side of the valley. The vineyard can be in shade as early as 17:00 in the summer months making it a cooler, slower ripening area. The downward slope of the vineyards provides good airflow and, mainly due to water drainage, varietals ripen differently uphill versus downhill.

The soils on the Golden Mile Bench consist primarily of rocky clay loam soil, characteristic of the Golden Mile Alluvial fan. In fact, the stone archway above the winery entrance was constructed with rocks from the Gewürztraminer vineyards. These heavier soils are more difficult to plant due to a large number of rocks, but the soil holds moisture longer so less irrigation is required. Additionally, less fertilizer is needed due to high nutrient content and vines grow more vigorously in these conditions. As a result, the vineyard team does shoot removal and leaf thinning during the summer to keep the fruit exposed to the sun and to ensure the vine is in balance. The previous owners planted Pinot Noir in 1989, Merlot between 1989 and 1991, and Kerner and Chardonnay in 1990. Today, there are ten varieties of grapes planted at this site including Gewurztraminer, Pinot Gris, Chardonnay, Viognier, Sauvignon Blanc, Muscat, Roussanne, Pinot Noir, Malbec, Syrah, and Petit Verdot.



WHAT TO DO AT THE WINERY

THE WINERY

Tinhorn Creek Vineyards is situated on a hillside surrounded by vineyards and sage-covered terrain. A tree-lined drive leads visitors to gardens and a fountain – designed to resemble Tinhorn Creek, which runs to the south of the property. Visitors are ultimately led to a beautiful winery facility that acts as a beacon welcoming wine lovers to the south Okanagan Valley. The winery overlooks lush vineyards with views of the grape crush pad. The impressive interior galleries have a view of the working cellar below. All the stone structures around the winery – the arch, the central garden, the walls along the east edge – were built from rocks sourced from the vineyard when the land was prepared for the Gewürztraminer planting.

SELF-GUIDED TOURS

Tinhorn Creek's innovative self-guided tour of the winery, barrel cellar and demonstration vineyard enables visitors to stay as long as they wish and provides ample information about viticulture and winemaking for beginners or wine afficionados. Taste grapes right off the vine and compare a glass of wine from the same varietal. The friendly and knowledgeable tasting room staff is on hand to fill in any gaps and answer questions.

TASTING ROOM AND WINE SHOP

The tasting room and wine shop offer complimentary tastings of Tinhorn Creek's wines and are well stocked with many gift ideas for the wine enthusiast. Tours and groups are welcome, and a picnic can be assembled from the deli case to be enjoyed under an umbrella on the sun-drenched picnic area. The wine shop and tasting room is open 10:00 a.m. to 6 p.m. March to October and 10 a.m. to 4 pm November to February. Special guided tours can be arranged for groups of 6 or more by appointment.

AWARD-WINNING MIRADORO RESTAURANT

At Miradoro, the Mediterranean influenced wine county cuisine showcases the region's finest ingredients alongside the award-winning wines of Tinhorn Creek Vineyards. Perched on the picturesque winery estate on the famed Golden Mile Bench, this destination restaurant offers stunning views of the south Okanagan Valley. Its unique design seamlessly integrates a modern look with the natural landscape and the more traditional design of Tinhorn Creek's winery and barrel cellar. The 4000 square foot space features 65 indoor seats and 65 outdoor seats on a wraparound deck, and ample use of natural woods and cork flooring creates a room that is simple, elegant – and lets the food, wine and view be the stars of the show. Miradoro has been awarded Gold for Best Winery / Vineyard dining at the Vancouver Magazine Restaurant Awards every year since 2012.













MORE THAN A WINERY

AMPHITHEATRE

Constructed in 1998, Tinhorn Creek's amphitheatre was originally a gully that was back-filled with earth removed from where the winery stands. The new slope created a bowl overlooking the breathtaking south Okanagan Valley and is now a spectacular 500-seat outdoor venue – and home to the winery's annual summer Canadian Concert Series and outdoor events.

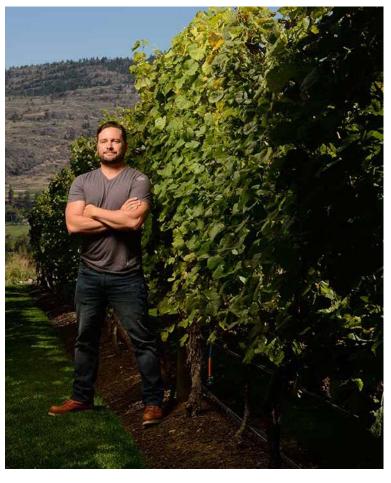
CANADIAN CONCERT SERIES AT TINHORN CREEK

Tinhorn Creek's concert series consists of five concerts, one each month from May through September. From the outset, the series has been extremely successful with each performance selling out well in advance. After a number of successful seasons, Tinhorn increased the profile of the series and invited Colin James to perform (another sold-out performance) at a special 10th Anniversary Concert. This event showed the strong demand for Canadians to see Canadian artists while enjoying Canadian wine and an idea was born. Now, each year, Tinhorn Creek holds a special "Signature Concert" where one of Canada's premier artists plays the September grand finale of the season. Past performers for the "signature concert" have been Colin James, Spirit of the West, 54-40, Prairie Oyster, Lisa Brokop, Blue Rodeo, Bedouin Soundclash, The Trews and Big Sugar.

GOLDEN MILE TRAIL

For adventurous guests, Tinhorn Creek developed a short "Golden Mile" hiking trail featuring stunning valley views that takes hikers past the vineyards and up to the Tinhorn Creek stamp mill ruins. The Golden Mile Trail was the brainchild of Tinhorn Creek employees in the mid-1990's who shared their enjoyment of the perfect hiking in the hills. The hospitality team wanted to create a place where winery visitors could hike, enjoy the wilderness and embrace the history of the area. To get things started, they spearheaded the project by mapping out the trail, arranging signposts, and talking with local landowners and rangeland lessees. In 1997, the trail was ready for hiking, and the trail expanded in 1999 through a government work program to include Hester Creek and Gehringer Brother's estate wineries. Tinhorn Creek spruces up the trail annually to keep it in good repair for all visitors.





Ontario-born Andrew Windsor's first taste of wine was a friend's parents' attempt at homemade wine, but it didn't put him off wine all-together and he went on to take a course in wine while studying Environmental Science at the University of Guelph. In his twenties, Andrew met Jamie McFarland of The Ice House Winery, who invited him to assist with his ice wine project in Niagara-on-the-Lake. Andrew experienced his first sharp taste of the winemaking world when he was called to pick grapes at 3 am in minus 12C weather.

Heading to warmer shores, Andrew completed his Masters of Oenology at the University of Adelaide in Australia in 2006 and then took an Assistant Winemaking role at Mollydooker Wines in McLaren Vale, where he lived on the beach and cycled to work through vineyards filled with kangaroos.

In April 2014, Andrew Windsor joined Tinhorn Creek Vineyards as their new winemaker. Tinhorn Creek's approach to winemaking has always been collaborative and Sandra Oldfield continued this tradition by running the winery as CEO & President while working together with her successor Andrew and the winemaking team.

Working closely with Viticulturist, Andrew Moon, and Assistant Winemaker, Korol Kuklo, Andrew oversees the winemaking process from vine to bottle. He brings with him a wealth of experience having worked in wineries in the

Okanagan, Marlborough in New Zealand and the Northern Rhone in France before returning to Canada to work as VQA Winemaker for Andrew Peller Limited in Niagara, Ontario.

Andrew continues Tinhorn Creek's tradition of creating much-loved wines but his fresh approach brings an exciting new element while helping the winery to continue to evolve and move forward into the next 20 years of exceptional winemaking.

ANDREW MOON - VITICULTURALIST & VINEYARD MANAGER



Andrew Moon moved from Australia at the end of June 2009 to join the team at Tinhorn Creek. He moved from a town approximately 160km north of Melbourne, Victoria.

In Australia, Andrew worked for Ormonhill Vineyards, Colbinabbin Estate and Freeman's Bridge Vineyards. He has a trade certificate in Viticulture Brit Bendigo, a Diploma in Viticulture from Melbourne University and completed three years of a Bachelor of Science Degree (Geography) at the University of Newcastle. In Australia, Andrew supplied fruit to a number of wineries over the years including Rosemount, Seppelt, Penfolds, Hanging Rock and Wild Duck Creek, achieving placement in premium and super premium wine labels. Andrew is a typical Aussie who loves wine, beer and food and appreciates the great outdoors, hence making British Columbia and Tinhorn Creek a very attractive place to work.



JAN NELSON - DIRECTOR OF SALES & MARKETING



Jan Nelson grew up in Oliver but left the Okanagan Valley in 1992 to begin over two decades of travel that took him to university in Montreal, a business school in Italy to gain his MBA, a brief stint in Korea and over 17 years in Japan.

"I'm proud of where I am from, so I want people to learn about, experience and enjoy the Okanagan and its wines," says Jan. "The industry here is still relatively new, so we are empowered by our future and not limited by our past. We are still discovering our potential, our strengths, as well as our weaknesses. There is no image to which we have to conform, and we are surrounded by enthusiasm and not pretension. And you could not find a more beautiful region to share." In 2001, Jan was in Japan working in executive search when the tech bubble burst. He took some time off and completed a WSET wine course at Okanagan College. In order to break into the wine industry, he joined a start-up importing Pacific Northwest (Washington & Oregon) wines in Japan. Jan now has over thirteen years of experience in marketing and sales in the wine industry and has worked with some of the leading brands from the Pacific Northwest, Napa Valley and Italy.

MARK BUTSCHLER - BRITISH COLUMBIA SALES MANAGER



Born and raised in Vancouver, BC, BC sales manager Mark Butschler has always had a love of wine and food. His career began in the restaurant industry with corporate chains (The Cactus Club and Spectra Foods) and premier Vancouver restaurants (Century Grill and Joe Fortes). From there he found a home with Pernod Ricard Canada for nine years before moving to the Summit Fine Wines team, part of the Jackson Estates Wines family.

Mark contributes an in-depth knowledge of the BC market having worked in Vancouver, Whistler and Vancouver Island. He has also travelled the world visiting many of the major wine regions including France, Italy, Chile, Portugal, and, of course, the Okanagan.

He is currently working on his diploma from Wine & Spirit Education Trust (WSET). His passion for wine is apparent when you meet Mark; he is a true ambassador. In addition to wine and food, Mark's other passions include triathlons, mountain biking, running and hiking.

GOLDIE STRATE - ALBERTA SALES MANAGER



Goldie brings with her almost two decades of knowledge of the Alberta wine, beer and spirits industry. For nine years prior to joining Tinhorn Creek, she worked for Andrew Peller Limited in a variety of roles, including Alberta Key Accounts Manager, License Sales Manager, and Territory Account Manager. She also studied Business Administration and Management at the University of Alberta and UBC and holds a WSET (Wine and Spirits Education Trust) Advanced Level III certificate.

"As I love the pure, vibrant terroir of South Okanagan Valley, over the past 19 years, I have had the pleasure of representing VQA wines in the province of Alberta", says Goldie Strate. "I developed my passion for the wine after working in one of the first private Alberta liquor stores as a General Manager and I am excited to bring new opportunities and growth to Tinhorn Creek wines throughout our province".

When not spending time with her husband and seven grandchildren, boating, camping, biking and skiing; Goldie loves to cruise around the globe discovering local off-the-beaten-path wine and food spots.



SUSTAINABLE PRACTICES

LEADING THE WAY

The owners and management are committed to sustainable practices at Tinhorn Creek's winery and in its vineyards. Environmental initiatives include native plant restoration, a beetle release program and the installation of a fence to separate snakes from field workers and equipment.

Tinhorn Creek Vineyards became the first Canadian winery to complete the Climate Smart program and offset their carbon footprint to become Canada's first Carbon Neutral Winery. Climate Smart, launched in 2007 and similar to other programs worldwide, teaches business principals to measure, reduce and offset their carbon footprint. Former CEO Sandra Oldfield initiated the program, fully embracing the values and philosophy, taking the winery to a new level of environmental responsibility. The Climate Smart Program enabled Tinhorn Creek to calculate the total greenhouse gas emissions produced by the winery, target areas to cut emissions with a continued effort towards 100% carbon neutral practices, and finally, offset the carbon footprint with the help of Vancouver based Offsetters, Canada's premier provider of high quality solutions for individuals and organizations seeking to reduce their climate impact. This initiative is continuing with participation with both Climate Smart and Offsetters to reduce carbon footprints on an ongoing basis.







IN THE VINEYARD

Because Tinhorn Creek's vineyards enjoy a desert climate, fungicide, pesticide and herbicide sprays use is minimally compared to wetter viticulture areas. The vineyard team monitors crop and vine canopy on an ongoing basis, which is important for early detection of any mould and pest problems. Weather stations help them predict mould conditions so that they can reduce their spray program. When the winery planted their vineyards, they chose pest-resistant rootstocks to match the vineyards' drought and soil conditions. The vineyards utilize a mixture of grass seeds for vegetation between the vine rows. This permanent cover crop helps to enhance the soil quality and reduces erosion and runoff. In addition, all pruning, leaves and clusters removed during the year are left in the vineyard rows to add to the soil's organic nutrient content.

HABITAT SURROUNDING THE WINERY

No toxic baits or fumigants are used to control vertebrate pests in the Tinhorn Creek vineyards. Instead, the team modifies the pests' habitat (such as removing unnecessary brush and rocks) and also uses exclusion techniques (such as snake fencing, deer fencing, netting and sound repellents for birds). Habitat for beneficial birds (such as owls, hawks and eagles) is maintained, including all trees bordering the vineyard property. The winery team has also encouraged songbirds with bluebird nesting boxes throughout the winery land. Tinhorn Creek has protected areas of their property through agreements with The Land Conservancy so that sensitive areas will not be developed. All of Tinhorn Creek's vineyards have a buffer zone between the vineyard blocks and surrounding sensitive areas – either in the form of other neighbouring vineyards' blocks or a cleared zone of at least 6.1 metres. The winery team consults frequently with local biologists that are familiar with the sensitive species on the winery's property to help the team make decisions on how to manage their vineyard operations around these species. The winery also participates and hosts various collaborative year-round seminars in the south Okanagan to help identify and protect sensitive species they may come into contact with during normal vineyard operations. Native grasses, shrubs, and xeriscape are used whenever possible around the property. The team uses native bunchgrasses, plants and hydroseeding to renew areas that have been disturbed. New vineyard blocks are seeded with native grasses that require less irrigation. The vineyard management team prefers relocation of wildlife such as rattlesnakes, bears and frogs rather than termination.





WINERY CELLAR AND GROUNDS

Landscape residuals are chipped and used again on the property as mulch or added to compost. All grape pomace (seeds, skins and stems during harvest) is composted on-site for direct application to the vineyards. Cellulose powder & filter sheets used in wine filtration is incorporated into the compost. More frequently, cold stabilization of white wines (tartrate stabilization) utilizes a filtration technology that no longer requires the use of bulk chilling of tanks – a very costly use of energy in a wine cellar. Used barrels are sold or recycled – approximately 200 wine barrels per year. Barrels are treated with steam rather than hydro-filling to reduce water usage at the winery. Tanks are cleaned with a high-pressure new system, which reduces water consumption by 80%. Final rinse water is recycled for further applications in the winery. All wines undergo analysis "in-house" which reduces the need to ship samples to be analyzed off-site.

PACKAGING AND SHIPPING

All of the glass used to package Tinhorn Creek Vineyard wines comes in on full truckloads to reduce the winery's carbon footprint. All glass, cardboard, scrap metal, paper, and pallet wrap from both the winery and vineyard operations are recycled. Paper stock and cash register tapes are made from 100% recycled paper. All wooden pallets that arrive at the winery from glass manufacturers are recycled back to the manufacturers. All shipping case inserts come from recycled material cardboard. Whenever possible, the winery consolidates pallet shipments of wine to reduce shipping.

LAND STEWARDSHIP AND ENVIRONMENTAL EFFORTS

Tinhorn Creek's founders and former owners, Kenn and Sandra Oldfield, embraced a multifaceted stewardship approach to protect the critters in the vineyards and the environment in their care. As a result of their efforts, The Land Conservancy (TLC – www.conservancy.bc.ca) recognized Tinhorn Creek Vineyards as a Conservation Partner. The ongoing stewardship programs include:

ENDANGERED SNAKE PROTECTION PROGRAM

Tinhorn Creek partnered with the South Okanagan-Similkameen Stewardship Program (SOSSP) on a Snake Pilot Project to protect snakes and workers. The project included snake barrier fencing and worker safety training.



The fence, just over a foot high, keeps the snakes out of the vineyard and in their natural areas. When visiting the winery, visitors can see the fence off to the left as they drive up the main driveway. Based on the success of this pilot project, the SOSSP reports that snake fencing is being used in many other local areas including residential developments, a resort, and a hydroelectric substation. Fencing is also used to keep snakes off roadways where traffic mortalities are high.

ANTELOPE BRUSH HABITAT RESTORATION PROGRAM

The Antelope Brush habitat of the South Okanagan is a fragile ecosystem. Tinhorn Creek with TLC and SOSSP replanted over 600 native shrubs, wildflowers and bunchgrasses at the top of the Tinhorn Creek vineyard. This was the second replanted area on the property. In 2006, a SOSSP representative reported a high survival rate of most species including sumac, rose, mock orange, yarrow, brown-eyed Susan, sage and buckwheat. Unfortunately, many of the antelope brush plants have not survived. This is not surprising, but still disappointing, as larger plants do not replant well. Maintenance and supplemental planting were performed in 2017.

ENVIRONMENTALLY FRIENDLY DALMATION TOADFLAX WEEK CONTROL

Tinhorn Creek looked for an environmentally friendly way to deal with the non-native Dalmatian toadflax weeds. Instead of using herbicides, the vineyard released 400 Mecinus Janthinus (stem-boring beetles). Although the adult's feed on leaves and stems, the damage is done after the females lay eggs inside the stems. As the larvae mature, they feast on the inside of the stems and disrupt the weed's growth. The goal is to establish a long-term balance between the beetle and toadflax populations. The program is working successfully. Most of the plants in the target area are stunted and not flowering. The beetles are busy doing their jobs and have spread to patches of toadflax more than 100 metres from the original release site.







