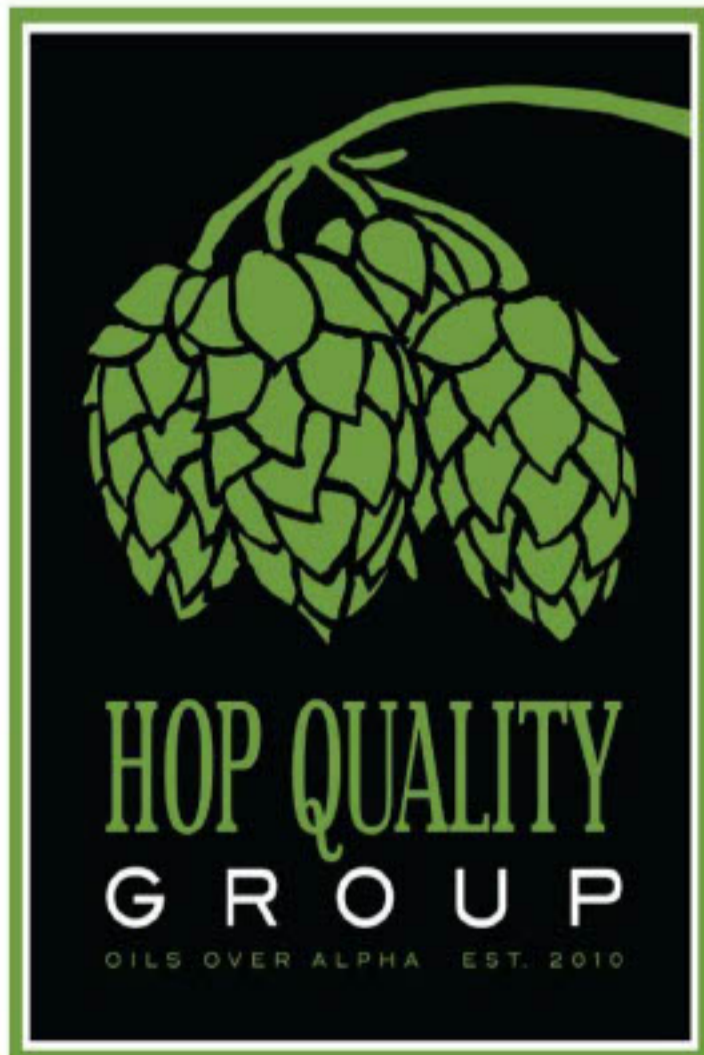


<b>HQG Visit Date:</b>	3/22/23
<b>Farm/Facility:</b>	Hop Revolution
<b>Picker Name &amp; Grower Number(s):</b>	Wairua; Tapawera.
<b>Grower Name &amp; Phone:</b>	Susan Wheeler: +64 21 824 440;
<b>Physical Address of Farm/Facility:</b>	Wairua: 65 Old School Road, Tasman 7072, New Zealand. Tapawera: 4574 Motueka Valley Highway Kohatu, Tapawera 7096, New Zealand. Office: 1/249 Trafalgar Street, Nelson 7010,
<b>Email Address:</b>	Susan.wheeler@hoprevolution.con.nz
<b>Picker Type(s) &amp; Description:</b>	Wairua: Kiwi built picker (Upson Engineering: Peter Upson). Tapawera: 2 Wolf Pickers.
<b>Merchant Partners/Direct/Both?</b>	Direct

<b>HQG Attendee &amp; Brewery</b>	Tristan Karosas – Single Hill Brewing
Jeremy Moynier – Stone Brewing	Matt Brynildson – Firestone Walker Brewing Company
Sam Pecoraro – Von Ebert Brewing	Scott Janish – Sapwood Cellars Brewery
Tom Cook – Von Ebert Brewing	Brad Benson – Stoup Brewing
Bob Kunz – Highland Park Brewery	Nick Pavlina – Humble Sea Brewing



**Operations Description:**

They have full time staff, a work program with Pacific Islanders, and a mix of seasonals (backpackers). 100 total with seasonals (20 year-round). They have a lot of female workers (in fact 100% of their tractor drivers are female on a couple of the crews). Each year they do a Harvest T-shirt that lists the crew's different countries. Use Koia Coconut husk for strings. Good signage throughout facilities! It's small rocks and dirt outside around both facilities.

**Wairua:** LED lighting or covered fluorescent bulbs. **Picker:** Kiwi built picker (Upson): runs off an iPad! Everything can be individually adjusted. Great safety guards throughout! 3,600 bines per hour. 4 lines to the pickers. 3 sets of Dribbles. All bines are dropped on the floor before being loaded into the picker. Birds in picker. **Kiln:** multi-level drying "drying for dummies." Wolf-style drying system. Variable temp kilns. Can rehydrate or dehydrate on floor. Diesel generators. They would need to add a kiln to go to full capacity. Magnets inline on way to baler.

**Tapawera:** she was one of the first farms to open in this valley. They were in clean-up mode when we visited. **Picker:** 2 lane upright Wolf pickers. Nice safety zone built in so you cannot get close to moving parts. Ability to wet hops prior to picker but not necessary this year because of water amount. **Conditioning:** walls between picking and conditioning. We talked about the wood that is used in these systems. New so still in good shape. There is breathable plastic that could be used. Open conveyance. Big magnets on conveyance were massive!

**Pelletizing:** Bales go to Freestyle for pelletizing within the hour. Also, shipping bales overseas to Crosby in Oregon for processing. Doing CGX at Crosby in addition to T-90. 7-10 days conditioning before putting on the boat. 3-8 weeks for shipping bales over the water. 50% Freestyle, 50% Crosby. Temp. tracking on the ships and so far they have had no issues. This year the first containers arrived at Crosby during CBC! Did HSI studies on CY22 pellets that were transported in bales last year to Crosby and pelletized and didn't see any movement in HSI. They blend lots on sensory and analytical. Have some variety blends as well.

**Other:** they do full cleaning after harvest. They do have to wait a few months to scrape. If they start getting rain they can pull a crew to scrape. Vests and ear protection provided. Tractors on road have to have a lead car. Left a fair amount of hops on the wire because they didn't meet quality standards: Wairua farm is only in its first or second year of production depending on the block. They saw some variability of soil structure for ripening – some challenges with ground development. Selective harvest on some blocks so less quantity but better quality. Alphas high this year. NIR in lab. Diesel generators for both farms are external to the buildings: for drying it all goes through a heat exchanger so no diesel fumes get close to the hops. Food-grade lubes used.

**Areas of Concern:**

Wairua: Unlabeled spray container (but confirmed food-grade), some cobwebs, 3-4 birds flying around picker.

Tapawera: there was a bird in the conditioning area.

Both facilities are surrounded by dirt and small rocks.

**Improvements since last HQG visit (if applicable):**

First time HQG visit. Individual members have visited in the past.

**Recommendations:**

Ensure all containers have proper labels.
Ensure cobwebs are cleaned so they can't get into the hops.
Mitigate birds getting into processing areas. Have screens, netting on openings, and keep doors closed.
Ensure that rocks are not coming in from outside.
There are risks with hops staged on the ground before hanging in the Picker. It sounds like there are some strict NZ guidelines that force this method of staging. Good topic for further discussion to see if there are any creative solutions. Designated areas with floor markings? Regularly wash/clean areas to mitigate boot, truck, and tractor contamination?
Ensure that wood is inspected on a regular basis in the Wolf System to mitigate pieces getting into hops. Alternatives to wood?
Ensure clutter is kept to a minimum to avoid getting any debris into hops.

**Additional Comments:**

<b>What hop varieties are grown? Acreage?</b> <ul style="list-style-type: none"><li>● 800 acres (400 is Nelson!). Nelson, Motueka, Riwaka, Pacific Sunrise, Moutere, Wai-iti, Kohatu, Rakau, Waimea. Blends: Revolution Blend, Turkey's Pick.</li></ul>
<b>Does Grower plan any major upgrades in the near future?</b> <ul style="list-style-type: none"><li>● Both are newer facilities. No major upgrades planned. They may do another farm in the future.</li></ul>
<b>Does Grower operate multiple facilities? If yes, how many? Facility names and locations (grower numbers)?</b> <ul style="list-style-type: none"><li>● 2 facilities. Tapawera and Wairua.</li></ul>
<b>Does Grower custom pick for anyone else? If yes, who?</b> <ul style="list-style-type: none"><li>● When we were at Wairua they were picking for their neighbor.</li></ul>
<b>What certifications does the grower possess, if any?</b> <ul style="list-style-type: none"><li>● Global Gap (certified March 2020 from first harvest onwards) – coordinated through Ann George. Neighboring grower follows these regulations as well.</li></ul>
<b>Additional Comments about the operation?</b> <ul style="list-style-type: none"><li>● Hop Revolution is a very impressive operation. Your passion and dedication towards quality is very evident. You have put a lot into the facilities and farms. Thank you for allowing the HQG to come and visit and letting us give you some recommendations – we appreciate the conversations around producing quality hops. We would love to come back and visit again. Cheers!</li><li>● Virtual discussion of report on 8/3. Hop Revolution was very receptive to our feedback and look forward to future visits.</li></ul>





