



# THE HARLEQUIN

## VFFN Newsletter—Winter Edition—2018

Once again VFFN ended its year with a great Christmas Gathering this time at Jon & Rika's home. The evening was fun filled with plenty of good food, games to tax the naturalists' knowledge of the natural world, lots of prizes, and an opportunity to socialize with other members.



Barred Owl greets cross skiers at  
China Ridge Ski Trails.  
(Photo: John Henry)

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### CHRISTMAS BIRD COUNT

An event occurs every year amongst naturalists' societies called the Christmas Bird Count. The activity is administered by the National Audubon Society. The purpose is to provide population data for use in science, especially in conservation and biology. It is a census of birds done annually during the month of December. There is no exact date except that it occurs between mid-December to January 5th. Why you might ask at this time of year, especially, since the temperatures are not exactly conducive to standing still and watching? Apparently, it is a time when an accurate count of resident birds can be taken. Clubs choose one day to do the count, referred to as the Count Day and 3 days prior and 3 days after is referred to as the Count Week.

Vermilion Forks Field Naturalists, being a small organization, has a small number of volunteers within its membership who come out regardless of the weather to do this count. Participation is not just limited to membership but to anyone that wants to help.

On VFFN bird count day there were 9 volunteers in the field and 5 reports from bird feeder watchers. There were 40 species for Count Day with the Common Raven having the highest number at 191 and the Chestnut-backed Chickadee as the unexpected bird. For count week another 7 species were sighted. The Northern Goshawk was the nice find for count week.

The tradition of Bird Count had an inauspicious beginning. "In the 19th century North Americans participated in what was known as Christmas "side hunts" in which they competed to see how many birds they could kill on a certain day. In December 1900 the US ornithologist Frank Chapman, founder of Bird-Lore (later the Audubon Magazine) proposed counting birds on Christmas instead of killing them; that tradition has continued to this day." --Wikipedia



Although, not the most plentiful at Bird Count the Bald Eagle was nonetheless, spotted by many of the bird counters.

(Photo: Sue Elwell)

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## EVENING SPEAKERS

DATE: January 9, 2018

SPEAKERS: Mary Masiel & John Henry

TOPIC: Local Hikes, Far & Near

This presentation was an opportunity to show everyone some the areas that have been visited by the naturalists and also some of the areas that could still be visited. A hike regarded as near was one that took about half an hour to one hour to reach the trailhead. A far hike was one that took two hours or more to reach the start. Participating naturalists had an opportunity to see themselves in different settings and have a good laugh and it gave others who aren't able to join us on these hikes an idea of where we spend every second week each month.





Incredible vistas in Jim Kelly Peaks area



Spectacular Yak Mtn. in the background



Tip Anderson's Leap of Faith



Kilpoola area in autumn



Similkameen River flowing over Enloe Dam near Oroville, Washington



DATE: February 13, 2018

SPEAKER: Sue Elwell

TOPIC: Hummingbirds—Near & Far

Sue Elwell began her presentation by telling the audience the proper way to prepare the nectar for the hummingbirds.

RECIPE: One part sugar — 4 parts water. The mixture is boiled then cooled before filling the feeder. Boiling the water slows down fermentation. If the mixture becomes cloudy, it has become contaminated and needs to be replaced. Fermented nectar causes liver damage which results in the bird's death.

The feeder needs to be kept clean at all times; Sue gave out a handout describing the different ways of cleaning a feeder. A dirty feeder can cause a deadly fungus infection and makes it impossible for the bird to feed and results in a slow and painful starvation death. This fungus infection can also be passed on to the young hummingbirds eventually leading to their death.

There are four species of hummingbirds in our area, the Rufous, Anna's, Calliope, and Black-chinned. There are over 300 species of hummingbirds world wide. Sue then proceeded to show some of her wonderful slides of hummingbirds photographed in Arizona, Costa Rica, and Ecuador. It was an interesting and informative presentation.



## SPECIAL FEATURE: Hoar Frost

Hoar Frost is a feature that occurs most winters in the Princeton area. It has beautiful forms and delights the winter walker, snowshoer, or cross country skier.

**Hoar frost** (also **hoarfrost**, **radiation frost**, or **pruina**) refers to white ice crystals deposited on the ground or loosely attached to exposed objects, such as wires or leaves. They form on cold, clear nights when conditions are such that heat radiates out to the open air faster than it can be replaced from nearby sources, such as wind or warm objects. Under suitable circumstances, objects cool to below the frost point of the surrounding air, well below the freezing point of water.

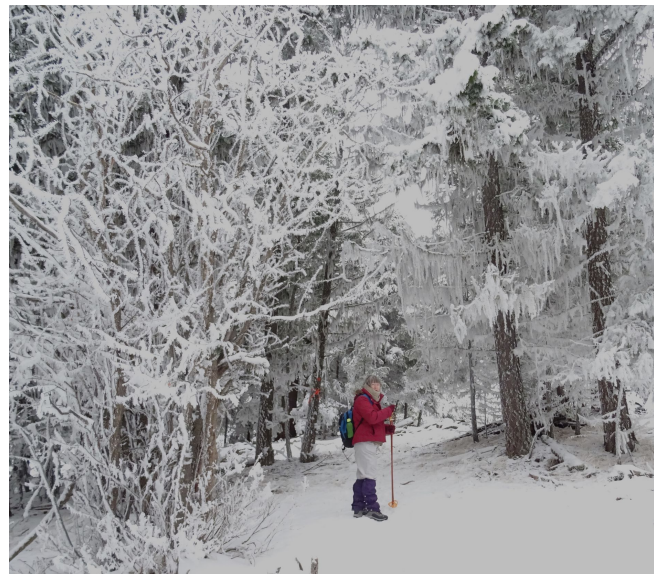
Such freezing may be promoted by effects such as **flood frost** or **frost pocket**. These occur when ground-level radiation loses cool air until it flows downhill and accumulates in pockets of very cold air in valleys and hollows. Hoar frost may freeze in such low-lying cold air

even when the air temperature a few feet above ground is well above freezing. The word *hoar* comes from an **Old English** adjective that means

"showing signs of old age". In this context, it refers to the frost that makes trees and bushes look like white hair.

Hoar frost may have different names depending on where it forms:

- **Air hoar** is a deposit of hoar frost on objects above the surface, such as tree branches, plant stems, and wires.



- **Surface hoar** refers to fern-like ice crystals directly deposited on snow, ice or already frozen surfaces.
- **Crevasse hoar** consists of crystals that form in glacial crevasses where water vapour can accumulate under calm weather conditions.
- **Depth hoar** refers to faceted crystals that have slowly grown large within cavities beneath the surface of banks of dry snow. Depth hoar crystals grow continuously at the expense of neighbouring smaller crystals, so typically are visibly stepped and have faceted hollows.

When surface hoar covers sloping snowbanks, the layer of frost crystals may create an avalanche risk; when heavy layers of new snow cover the frosty surface, furry crystals standing out from the old snow hold off the falling flakes, forming a layer of voids that prevent the new snow layers from bonding strongly to the old snow beneath.

Ideal conditions for hoarfrost to form on snow are cold clear nights, with very light, cold air currents conveying humidity at the right rate for growth of frost crystals. Wind that is too strong or warm destroys the furry crystals, and thereby may permit a stronger bond between the old and new snow layers. However, if the winds are strong enough and cold enough to lay the crystals flat and dry, carpeting the snow with cold, loose crystals without removing or destroying them or letting them warm up and become sticky, then the frost interface between the snow layers may still present an avalanche danger, because the texture of the frost crystals differs from the snow texture and the dry crystals will not stick to fresh snow. Such conditions still prevent a strong bond between the snow layers. (Information courtesy of wikipedia)

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Contributions to the Harlequin are welcome. If you submit a photo, do a write up to go with it. Please send your submissions to Mary, [vffnbc@gmail.com](mailto:vffnbc@gmail.com)