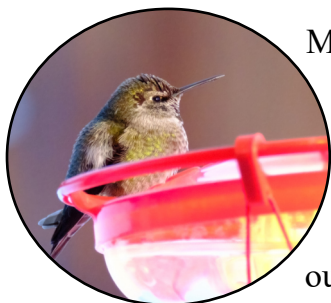


# Feeding Anna's Hummingbirds in Winter

North Central Washington Audubon Society

Bruce P. McCammon

January 2022 v1.2.5



Many people feed birds for the sheer joy of seeing them frequently and up close. Hummingbirds hold a special place in the mix of birds we may see at our feeders.

Of the four hummingbird species we see in North Central Washington, Rufous, Black-chinned, and Calliope all migrate to Mexico when the time is right. Anna's Hummingbirds are present all year in many parts of North Central Washington and are the only hummingbird species that does not migrate to Mexico or beyond. [The Cornell Lab points out](#) that Anna's either don't migrate or else migrate a very short distance to better feeding grounds.

Providing nectar for Anna's in winter is controversial. Issues that are central to the winter feeding controversy include:

1. A concern that feeding in late summer and fall will hinder natural migration patterns,
2. That Anna's are being encouraged to expand and stay over winter, thus putting them at risk.
3. The best ways to prepare and present nectar for them during winter.

This article provides information that will help you decide on your personal approach to winter feeding. It is not the purpose of this article to sway you one way or the other on any of these topics. The article consolidates credible information to help you make the best choice based on your personal understanding and ethics. The NCW Audubon website's [Hummingbird page](#) provides information about these concerns that may be helpful to you in making your personal choice.

Choosing to feed hummingbirds during cold periods is, first and foremost, **a commitment you make**. If you start to provide nectar in a feeder during the winter, you inherit the obligation to continue. That

means keeping the feeder frost or ice-free, clean, and safe for the hummingbird's use. If you can not make that type of commitment, quit feeding in late summer or fall to allow the birds to locate replacement food sources.

## Addressing the concerns

The concern that feeding in the fall will prevent hummingbirds from migrating is a long-lived myth. The Cornell Lab of Ornithology addresses this directly on their website page titled "[Should I Stop Feeding Birds in Fall So They Can Start Their Migration?](#)"

*"Keeping your feeders up has no influence on whether a bird will start its journey south. A number of factors trigger the urge for birds to migrate, and the most significant one is day length. As days grow shorter in late summer, birds get restless and start to head south, taking advantage of abundant natural food, and feeders where available, to fuel their flight."*

*Hummingbirds are no different from others and will migrate regardless of whether feeders are kept up. However, we encourage people to keep feeders up for several weeks after the last hummingbird leaves the area, just in case a straggler shows up in need of additional energy before completing the long journey south." (Cornell Lab of Ornithology)*

[Greig, et al.](#) point out that humans may alter the distribution and the migratory behavior of species through landscape and resource modification. Anna's Hummingbirds have expanded north and east from the California bay area since the 1930's. They continue to expand their range as urbanization provides new yards with planted flowers, shrubs, and feeders. Today, they are present in much of North Central Washington. We do not know if the Anna's we see here in the summer are the same birds we see in winter. Likewise, we do not know if Anna's perform short-range elevational or areal migrations. We do know that Anna's are present all year in North Central Washington and that humans influenced them to be here. [Climate change](#) also influences the Anna's range expansion.

Does it follow, then, that without feeders we would not be luring the wee birds into a dangerously cold situation when winter arrives? This is less certain. As long as people continue to plant flowers that attract and nourish hummingbirds, these birds will likely occupy the space provided, feeder or no feeder. The availability of natural food is limited in winter. Without feeders, there is a higher likelihood that the birds would perish.

Given that the birds are here, how can we best provide for them? A commitment to continue feeding during winter adds two new topics to address: the way nectar is prepared and how to keep it from freezing.

## Nectar preparation

Over the last few decades it has become the “holy grail” of nectar preparation to mix one part of pure cane sugar with four parts of water. This 4:1 ratio is based on the [study of nectar sweetness in flowers](#) and provides a good mix of energy and water for hydration. Sheri L. Williamson, author of *Hummingbirds of North America*, has a [short video](#) about the history of nectar preparation that also provides clear advice for use today.

- The water you use should be water that you would drink yourself.
- Pure cane sugar is the only thing that should be used.
- Advice about boiling or not boiling the water prior to mixing with sugar is quite varied. Some sources say “yes, boil the water” and others say that it is not necessary to boil prior to mixing. If you bring drinking water into your house for your personal use, you likely have a reason to suspect your domestic tap water. Boiling tap water will help to reduce chlorine levels and any possible contaminants other than heavy metals. Use your own discretion. Unless you are making caramel, don’t boil a water and sugar mixture.
- Sheri Williamson also provides a [list of things that should never be used](#) in hummingbird nectar. Included in her list are: honey, molasses, powdered sugar, and artificial sweeteners. Please look at her list for other ingredients that are not only not needed, but may be dangerous.
- 4:1 is always a safe ratio of water to sugar. Natural flowers provide a wide range of sweetness. A majority of flower nectar ranges from 3:1 to 5:1. Sheri Williamson states that a range of 3:1 to 5:1

are all fine to use. Why would we use anything other than 4:1? The [Cornell Lab of Ornithology](#) states that using a 3:1 ratio will lower the freezing point of the nectar and provide additional energy through a more concentrated solution. 3:1 is only appropriate when temperatures are quite cold. Switching from 4:1 to 3:1 when daytime lows of 25 degrees F are common is a reasonable starting point. If 3:1 is okay, is 2:1 better? **NO**. Below a 3:1 ratio the nectar loses the precious ability to keep the birds hydrated as well as nourished. Similarly, using a 5:1 ratio in hotter periods may be advisable in order to provide additional hydration capability.

- If you have any reservations about switching the proportion of sugar to water in your home-made nectar, stick to 4:1 and use only water you would drink and pure cane sugar.

## Feeder cleanliness

One of the most important aspects of feeding hummingbirds (at any time) is maintaining a clean feeder. Internet resources show a wide range of recommendations about how often to clean your feeder(s). The goal is to always provide a clean vessel to hold your nectar. [The National Audubon Society](#) states that:

*“in hot weather, the feeder should be emptied and cleaned twice per week. In cooler weather, once per week is enough. If your hummingbirds empty the feeder with greater frequency, clean it every time it’s empty. Cleaning with hot tap water works fine, or use a weak vinegar solution. Avoid using dish soaps, as this can leave harmful residue in the feeder.”*

Heated feeders will need to be cleaned and refilled more often than unheated feeders. Two to three times each week is a good practice.

A clean feeder will prevent specific diseases such as candidiasis or aspergillosis. The National Audubon Society has a [video that shows you how to clean](#) a saucer type feeder. Cleaning other types of feeders should follow the same steps but may be more challenging to implement based on the feeder design.

If your nectar is cloudy, dispose of the nectar and clean the feeder thoroughly. Any sign of mold or mildew in the feeder, including the feeding ports, means that a deep clean is needed.

## How to keep a feeder unfrozen

Availability of liquid nectar is critically important. If you take a feeder in at night to keep it unfrozen, it is **really important** to have it back out and available for the birds **well before sunrise**. When the birds come out of torpor they need food... NOW. Do not make them wait for you to finish your coffee or tea. Birds come first.

A 4:1 nectar mix will not freeze until the air temperatures approach 28-29 degrees F. Once the risk of freezing arrives, keeping the nectar liquid becomes a challenge. There are two general approaches to doing this:

1. Use multiple feeders and keep one inside to remain unfrozen. Swap the unfrozen feeder for one that is starting to freeze up. As a feeder begins to freeze, the nectar concentrates and the hydration value lessens. Try to swap your feeders out well before they freeze. After bringing in a feeder to thaw or warm, make sure that the feeding ports are open. Sticking a toothpick or small probe through the holes will free them of any frost or ice.
2. Use a heat source to keep the nectar unfrozen. People are amazingly creative when it comes to adding heat to a feeder. Solutions you can find using a simple Google search include:
  - Commercial feeder heaters like the [Hummer Hearth](#) or [Hummers Heated Delight](#). Having a couple of extra bulbs on hand is wise. The Hummer Hearth will accept a 15 watt bulb for very cold temperatures. The Hummers Heated Delight uses a 7 watt bulb.
  - Do-it-yourself options. When planning to use a lamp or electrical device outside, ALWAYS make sure that the device and power cord are designed for outside use. Keep electrical parts sheltered from moisture. Adding a dome above the feeder will help keep it snow-free. Do-it-yourself solutions include:
    1. Hand warmer packs taped to the bottom of the feeder
    2. Hand warmer packs taped to the nectar vessel when the feeder uses an upright container.
    3. Trouble light taped to the bottom of a feeder.

4. Wrapping a nectar vessel with bubble wrap and enclosing in a sock
5. Wrapping incandescent Christmas mini-lights around the feeder
6. Placing a light bulb in a flower pot and putting the feeder on top of the pot
7. The list goes on and on....

## Cautions

Always consider the safety of the bird at your feeder. Wires or strings should be arranged such that they do not pose any threat of a bird becoming entangled.

In freezing weather, avoid feeders that are made of metal or use metal parts. Birds can freeze to the metal. Some people wrap the metal with tape to lessen the risk of trapping a bird by freezing it to the feeder.

When in torpor, hummingbirds may look like they need your help. Hummingbirds in torpor may [hang upside down](#). Avoid handling a bird unless the situation is clearly a threat to the bird. [Hummingbird first-aid](#) may be best handled by letting nature run its course. If you do intercede, here's how one licensed hummingbird rehabber [takes care of them](#) as they recover.



## Summary

Anna's Hummingbirds are present all year in much of North Central Washington. The use of feeders will not stop hummingbirds from migrating. To the contrary, the proper use of feeders during the winter months may help these hardy birds survive to entertain us again in the spring.

**Celebrate the Anna's.**

## References (in the order in which they appear in the text)

Cornell Lab: [Anna's range map](#)

[https://www.allaboutbirds.org/guide/Annas\\_Hummingbird/maps-range](https://www.allaboutbirds.org/guide/Annas_Hummingbird/maps-range)

[NCW Audubon Hummingbird page:](#)

<https://ncwaudubon.org/hummingbirds/>

Cornell Lab: [Should I Stop Feeding Birds in the Fall so They Can Start Their Migration?](#)

<https://www.allaboutbirds.org/news/should-i-stop-feeding-birds-in-fall-so-they-can-start-their-migration/>

Emma I. Greig, et. al., [Winter range expansion of a hummingbird is associated with urbanization and supplementary feeding.](#)

<https://royalsocietypublishing.org/doi/full/10.1098/rspb.2017.0256>

S. W. Nicolson and P. A. Fleming, [Nectar as food for birds: the physiological consequences of drinking dilute sugar water](#), *Plant Systematics and Evolution* 238(1):139-153.

[https://www.researchgate.net/publication/225746864\\_Nectar\\_as\\_food\\_for\\_birds\\_The\\_physiological\\_consequences\\_of\\_drinking\\_dilute\\_sugar\\_solutions](https://www.researchgate.net/publication/225746864_Nectar_as_food_for_birds_The_physiological_consequences_of_drinking_dilute_sugar_solutions)

[https://www.researchgate.net/publication/225746864\\_Nectar\\_as\\_food\\_for\\_birds\\_The\\_physiological\\_consequences\\_of\\_drinking\\_dilute\\_sugar\\_solutions](https://www.researchgate.net/publication/225746864_Nectar_as_food_for_birds_The_physiological_consequences_of_drinking_dilute_sugar_solutions)

S. L. Williamson, [The Best Hummingbird Nectar has a History?](#)

<https://www.youtube.com/watch?v=R5x4A8Db6HA>

S. L. Williamson, [Is molasses ok to feed hummingbirds?](#)

<https://fieldguidetohummingbirds.wordpress.com/2012/08/15/search-of-the-week-is-molasses-ok-to-feed-hummingbirds/>

Cornell Lab, [What's The Best Recipe for Hummingbird Nectar?](#),

<https://www.allaboutbirds.org/news/whats-the-best-recipe-for-hummingbird-nectar/>

National Audubon Society, [Cleaning feeders:](#)

<https://www.audubon.org/news/hummingbird-feeding-faqs>

National Audubon Society, [How to Clean a Hummingbird Feeder](#)

[https://www.youtube.com/watch?v=No\\_yyne719Y](https://www.youtube.com/watch?v=No_yyne719Y)

[Hummer Hearth:](#)

<https://www.hummerhearth.com/>

[Hummer Heated Delight:](#)

<https://hummersheateddelight.com/xcart/>

World of Hummingbirds: [Hummingbird Sleep](#)

<https://www.worldofhummingbirds.com/sleep.php>

World of Hummingbirds: [Hummingbird First-Aid](#)

<https://www.worldofhummingbirds.com/firstaid.php>

Ann Stratton, [Care of recovering hummingbird:](#)

<https://www.facebook.com/groups/1448166832107524/permalink/3504197966504390/>



North Central Washington  
**AUDUBON SOCIETY**

[www.ncwaudubon.org](http://www.ncwaudubon.org)



## Heated feeder examples



Bruce McCammon  
Hummer Hearth



Gale Parrish  
Hummer Heated Delight



Mark Kacmarck  
Anna's Hot Tub



Don Webb  
Trouble light



Mark Oswood  
Hummer Hearth +  
Bubble wrap