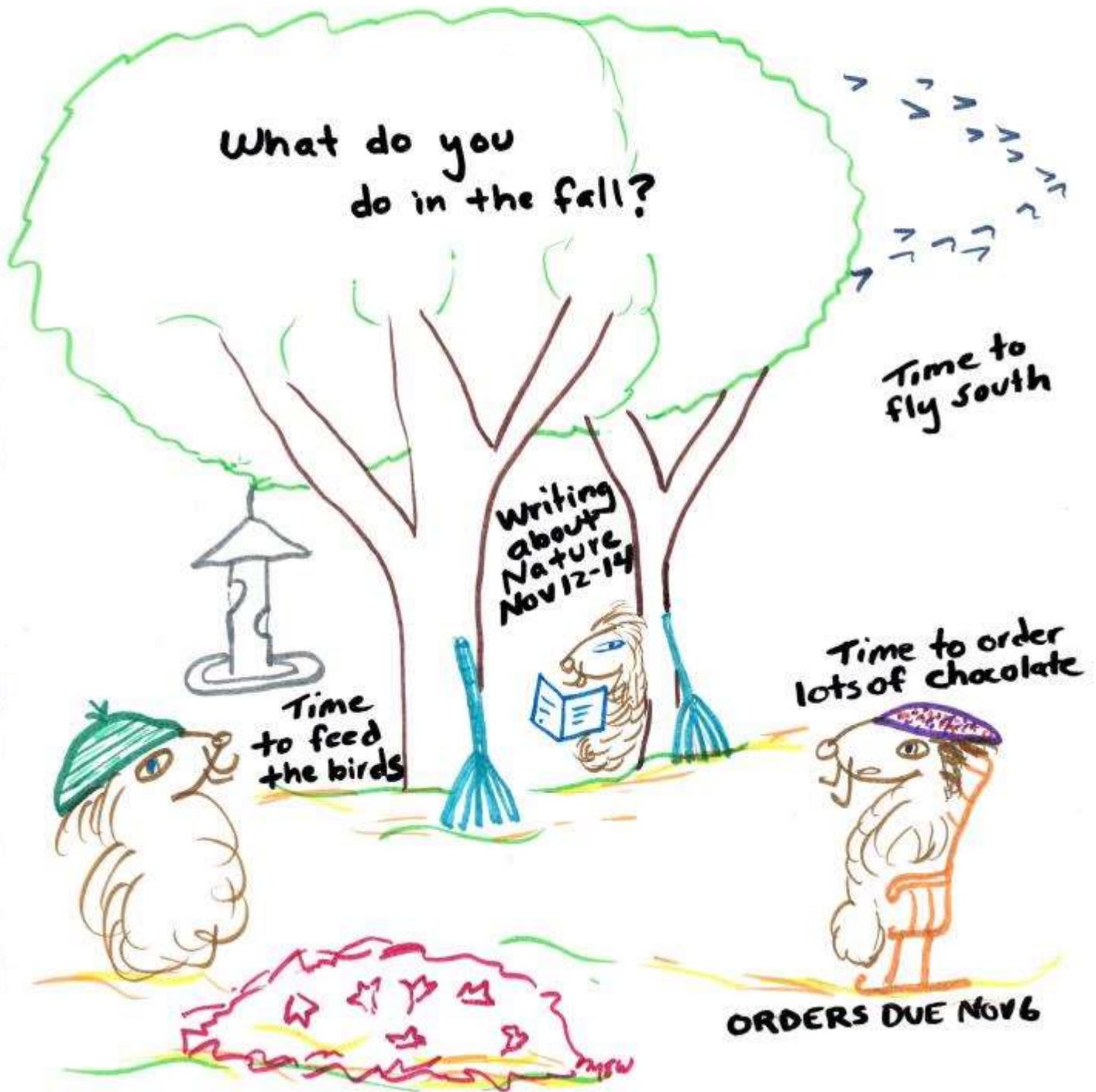


MUSKRAT EXPRESS

WILLIAMS LAKE FIELD NATURALISTS

OCTOBER + NOVEMBER 2014 NEWSLETTER





The newsletter for the:
Williams Lake Field Naturalists
1305A Borland Road, Williams Lake BC, V2G 5K5

Membership fees: Family (\$30), single (\$25) or student (\$10) memberships can be mailed to the above address. Please complete the membership and waiver forms available at the Nature Centre (250) 398-8532, muskratexpress@shaw.ca or the web site below. For more information about the club please contact Fred McMechan at 392-7680 or e-mail Fred_McMechan@telus.net

Williams Lake Field Naturalists Website <http://www.williamslakefieldnaturalists.ca>

Scout Island Nature Centre Website <http://www.scoutislandnaturecentre.ca>

Executive of The Williams Lake Field Naturalists: president Fred McMechan, secretary Ordell Steen, treasurer Katharine VanSpall and directors Nola Daintith, Cathy Koot, Peter Opie, Ray Hornby, Brian Chapman, Don Lawrence and Christie Mayall



Editors: Thanks to all of you who have contributed to this edition of the newsletter. We would like to see a couple of new/renewed regular items in your newsletter (a report on the recent exciting bird/critter/plant observations and book reviews from the Nature Centre library). A couple of paragraphs would be ideal so it would not be a big chore. If you are interested in helping with this



please let us know. Expect your next edition of the newsletter in early December. If you have comments, suggestions or articles for the next Muskrat Express please contact Margaret Waring (398-7724), Jim Sims (296-3638) or e-mail us at muskratexpress@shaw.ca

Earth Friendly Holidays (Free Family Event)

Arts Centre

Friday November 28 6-9pm and Saturday November 29 11:00- 2:00

JOYFUL, EARTH FRIENDLY ACTIVITIES

- Wrapping and Decorating—many groups leading these
[Wreaths-frames provided, natural item decorations, and wrapping]
- Scout Island Tables will be for the birds!—see below
- Wonderful Local FOOD

We Need Your Ideas and Help

- Do you have a simple craft idea that could be done by a person in 1 hour or so using either recycled items or natural items—let Sue know about it and if you want to lead it one of the days, let her know that too
- Can you bring buns, bread, finger foods (vegetables or fruit) or a pot of soup--Let Sue know
 - Can you help out on one of the days for 2-3 hours
 1. in the kitchen
 2. setting up (12-5 on Nov. 28) or cleanup 2-4 on Nov. 29
 3. guide a craft at a table—we need help at our bird table where we will be making suet feeders, chickadee and owl ornaments.

Please contact Sue at 250 398 8532 or shemphill@netbistro.com with your ideas or offers to help,

Chocolate is Coming—Great Holiday Gifts

Order form at the end of the newsletter

Scout Island Nature Centre will be doing a bulk order of organic free trade chocolate bars from Cocoa Camino (www.cocoacamino.com) again. The chocolate bars are fresh when they come and keep really well (tasting good one year later when kept at a steady cool temperature). We charge less than in a store and still make a bit of a profit for the Nature Centre. ****Note your order is due November 6th so don't delay or there will be NO CHOCOLATE for your Christmas stocking****

Annual Christmas Bird Count

From Phil Ranson

The 2014 Christmas Bird Count will take place on Sunday December 14th, 2014. Details will be provided in the December Newsletter. If you have questions please contact the count coordinator Phil Ranson 392-7110 or ranson1@telus.net



Churn Creek (photo by Lubna Khan)

Thanks to all the field trip leaders for 2014

Our field trip season has sadly come to end and it is time to thank all of the leaders who guided us on so many grand outings this year. We look forward to many more trips in 2015.



Scout Island Nature Centre News

From Sue Hemphill

The Grade 7 Outdoor Academy has been here every Tuesday from 8:30-3:15 for very full busy days. These are very energetic students. Kim, the teacher, combines academic work that uses nature as a focus with walks, field studies, quiet observation and stewardship work. I have had the great pleasure of joining them in these activities. The first weeks, we focused on invertebrates studies. Right now they are perfecting their birding skills. We are hoping that a few of them will take part in the Christmas Bird Count.



Back swimmer identified



Team work gets the heavy work done faster stewards at work

The great weather has encouraged other teachers and classes to come to explore also. Classes come to find out how plants and animals are getting ready for winter—and to play Eagle Eye and Wildlife are Watching. Paula has been busy doing Bat Lessons at the schools and Mary is in the school giving an alternate view of spiders and owls.



Williams Lake Field Naturalists News from the Executive

By Fred McMechan

(Business and activities involving the Nature Centre are covered in other parts of the newsletter)

- 1) The project to construct the elevated board walkway along the Cattail trail has been delayed until next year. Late in the summer there was a change in staffing after Kevin Goldfuss left the City and his replacement did not have enough time to plan the construction this fall.
- 2) Our letter to the Ministry of Environment expressing our concern about the need for a greater emphasis on environmental education in the new science curriculum was received and a reply was sent in August. The Assistant Deputy Minister replied and informed us that the Ministry was doing a revision of the curriculum to have inclusion of environmental education. One of our directors, Christie Mayall, has agreed to be a part of the BC Nature Committee which will provide input on this curriculum revision.
- 3) We are continuing to plan the BC Nature Camp at Tatlayoko Lake. Recently a budget was approved by the executive. We will be contributing an article on the Camp which will be placed in the BC Nature magazine, winter edition. As well we are preparing general information, and descriptions of the field trips and evening presentations which will go on the websites of BC Nature and our club in the latter part of November.
- 4) The Christmas Bird Count will take place in December and the organizer will be Phil Ranson. Information about this event is in the newsletter.
- 5) An ecologist who is working on a Whitebark Pine recovery project across the province is inviting naturalist clubs to become involved. He is especially interested in obtaining data about the Clark's Nutcracker. He wishes to develop a proposal which would provide an opportunity for naturalists clubs to participate. This would involve presentations to naturalists clubs on Whitebark Pine and training members on contributing data on Whitebark Pine/ Clark's Nutcracker. We will be replying back to indicate we wish to assist in this project.

Introducing the new Air Quality education program!

By Tammy Keetch and Jane Wellburn

How many litres of oxygen do you breathe daily? Take a wild guess. The average adult breathes 15-20,000 litres and average child 10-12,000 litres *per day!* Try going for longer than six minutes without air. Pretty quickly we understand how important air, and *clean* air, is to our survival and health yet so often we take it for granted! We've come a long way since bee hive burners were in Williams Lake that's for sure, but there is still plenty of room for improvement. According to a citizen survey conducted by the City (2011) Air Quality was identified as the number one environmental concern for Williams Lake citizens.

Beginning this fall my colleague and I through our new relationship with the Field Naturalists will be working to further educate the public and schools about air quality in the region and individual actions we can take to help improve it. Some of the topics we will be promoting include:

- active transportation
 - such as *Bike to Work and School Week* (spring) & *Walk and Wheel to School* (fall)
- clean wood burning, proper wood drying and storage
 - offering the Wood Stove Exchange as possible
- idling – myth busting and beyond
- alternatives to open burning with chipping and composting and
- zero or low emission yard and garden equipment.

You will see us at public events with our display and materials, educating students and teachers as part of the Earth Challenge and offering Air Quality classroom visits, doing community outreach through public presentations and information to the media. We work in partnership with the Williams Lake Air Quality Round table to help deliver the Williams Lake Airshed Management Plan that was reviewed last winter. Please visit the website for more information at www.breatheasywilliamslake.org

Thank you to those members who carried out bike counts in September to feed into a grant that the City submitted for improving cycling infrastructure in Williams Lake!

We look forward to working with all of you!

New Young Naturalist Club Leader

The Young Naturalist Club has a new leader. After 2 years of great leading, Julianne Trelenberg has passed the torch to Paula Laita. From now on, she will help young naturalists (ages 5-12 years) to discover and learn more about native wildlife and will encourage to take part in environmental actions to protect their habitat.

On the evening of August 26, she led her first Explorer Adventure to the caves near Bond Lake.

YNC goes batty

On the evening of August 26, members of the Williams Lake Young Naturalists Club led by the new leader, Paula Laita, went on an Explorer Adventure to the caves near town. They met at Scout Island Nature Centre and then car-pooled to the caves. They had a wonderful hike through the woods to the base of the rock cliff. They played on the rocks and explored every single hole until they found two big caves and got themselves into them!

Their second objective for the trip was to see and listen to bats, so they waited for dusk, since this is when the bats come out (just as you can see no green in the trees). Meanwhile, Paula gave them information about amazing mammals and their special features such as their ability to echolocate so that they can hunt in



the dark. Did you know that a bat can consume up to 600 insects per hour? Our local bat species hunt while flying mainly. Some can attack and insect every 7 seconds.

The wait was worthwhile as the Young Naturalists and their parents heard five bats on bat detectors. The detectors magnified the sound each bat made, so that human ears could hear it. We all saw one of them flying around too! They were probably Big Brown, Little Brown and Silver-haired Bats that were heard as the detectors were set at the frequencies of the calls that each of these species make.

YNC is an exciting nature discovery and environmental action program that invites young people ages 5-12 years to discover nearby nature on Explorer Day Adventures with local experts, learn about native wildlife and plants and take part in environmental actions to protect their habitat. They usually meet once a month and kids need to bring an adult. When you are a member, you receive a great magazine 4 times a year—one of the best children’s magazine around. If you are interested in joining or if you have any further questions, please contact Scout Island Nature Centre at (250)-398-8532 or email yncwilliamslake@gmail.com. Check out the Young Naturalists website too. www.ync.ca where you will find great information, get a look at one of the magazines and find a membership form.

Interesting Information Fox and Magnetic Fields

Foxes that tend to jump in a northern direction when hunting in high grass and snow have more success (74% north, 60% south, 18% east and west). They are using magnetic field lines to be more accurate in measuring distance. Ears tell the fox approximately where prey is. Magnetic field lines guide them to exactly where it is. Researchers suspect the fox has a magnetic sensor in its eyes that helps it see magnetic field lines sloping into the earth. Relying on its keen ears, it likely creeps up on rustling prey until the sound source is superimposed by a spot on the retina, which aligns with the magnetic field line inclination.



At a given height and slope of the head, that “sweet spot” is always the same distance from the fox., allowing it to execute a well-rehearsed jump to nab its dinner. Migratory birds detect magnetic field lines with their right eye.

American Goldfinch (*Spinus Tristis*)

Researched by Jim Sims

Sources: Checklist of Cariboo Chilcotin Birds, The Birds of BC Vol.4 and <http://www.allaboutbirds.org>.

During my recent visit to my Eagle Lake cabin a neighbour told me about a beautiful bright yellow bird with a black cap that had visited their cabin feeder. A couple of days later she had her phone with her and she had a photograph to show me. Sure enough it was the American Goldfinch. In April of 2010 I had my fist ever sighting of a male Goldfinch here at Rose Lake and like Mary I was also very excited. It was not until the tenth of October this year that they visited again. It started with 5 birds in drabber non-breeding plumage. About a week later one hit the window and did not survive. Today they were still around but I only saw two (hope the other two were at the neighbours feeder). The goldfinch is one of my favourite songbirds, going back to my youth in Ontario where we would watch their acrobatics hanging from the top of a milkweed or thistles and plucking seeds. I also recollect their bouncy flight pattern that was usually accompanied by their po-ta-to-chip calls.



**Male American Goldfinch
photo by Liz Twan**

The Checklist of Cariboo Chilcotin Birds ranks them as a breeding species that is fairly common (7 to 20 birds per locality) from late April to mid-September.

J	F	M	A	M	J	J	A	S	O	N	D

 The rest of the year they are uncommon (1 to 6 birds). They are also described as expanding their territory to the north to include Quesnel and Prince George. Perhaps they have also been expanding to higher elevations (Rose Lake) and west to Eagle Lake.

The American Goldfinch is one of the few bird species that rely almost completely on seeds for its diet, only taking the occasional insect by mistake. The vegetarian diet has resulted in some interesting adaptations. They nest later than most species waiting until late June or July when the seeds of the milkweed, thistles and other plants have matured. The seeds from these plants are often incorporated into the nest and of course are fed to the young. The female builds the nest with fibrous plant material and rootlets and lines it with plant fluff often woven so tightly that it will hold water. The foundation of the nest is lashed to the branches of the tree using spider webbing. Attempts by the Cowbird to use a Goldfinch as a host is most often a bad idea. The young cowbird only survives a few short days as it cannot live on a diet of seeds.



Adult in non-breeding plumage near Jim’s feeder

The American Goldfinch is the only finch that molts twice a year once in late winter and again late summer. The photos I took today are of adult birds in their non-breeding winter plumage. Note the conical bill, markings on the long wings in both plumages, lack of streaking and a strongly notched tail. A good place for you to observe this species is at Scout Island where they can usually be seen up close from the library window where they gather at the bird feeder.

Our View of the Night Sky – November 2014.

By Steve Capling

Planet Review

Mars is visible low in the southwest evening sky. Jupiter continues to rise in the early morning pre-dawn sky in the east. Look for Uranus in the southeastern sky as a pale green fuzzy object - magnitude 5.7 in southern Pisces. In the

first few weeks of November, Mercury is at its highest point above the sun early in the pre-dawn sky. By Nov. 20th it is lost in the sun's glare.

Meteor showers

The next forecast meteor shower is the Leonids that peaks on **November 17**. Looking towards the east to the constellation Leo after midnight will give the best chance of observing meteors.

Asteroid 6 Hebe

Around November 15th, Asteroid 6 Hebe will be well placed for observation, lying in the constellation [Eridanus](#) (located to the west of Orion), above the horizon for much of the night. It shines at mag 8.1, making it an easier target in telescopes. From Williams Lake it will be visible between 23:30 and 03:00. It will become visible at around 23:30, when it rises 24° above the south-eastern horizon, and then reach its highest point in the sky at 01:14, 29° above the southern horizon. It will disappear from view at around 03:00 when it sinks to 24° above the south-western horizon.

Major meteorite source

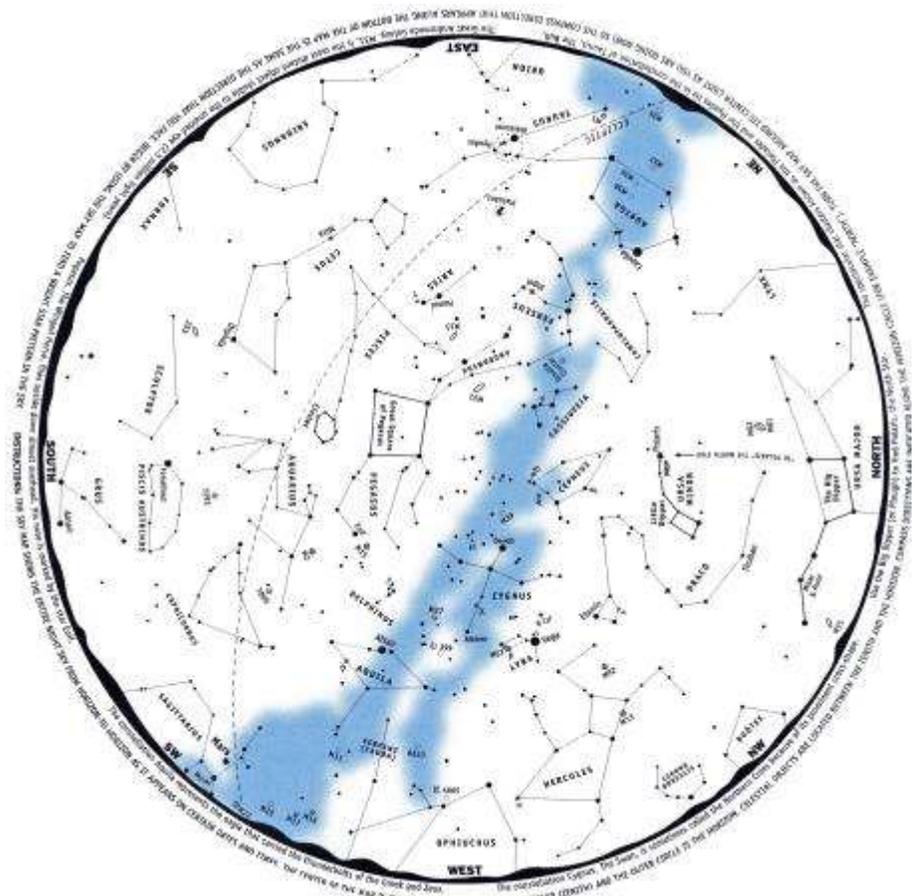
Hebe is the probable parent body of the [H chondrite meteorites](#) and the [IIE iron meteorites](#). The orbit of Hebe compares with the orbits of Earth, Mars and Jupiter. Recent research implies that it is the source of about 40% of all meteorites striking the Earth. Evidence for this connection includes the following (after Michael Gaffey and Sarah L. Gilbert.):

- The spectrum of Hebe matches a mix of 60% H chondrite and 40% IIE iron meteorite material.
- Hebe is extremely well placed to send impact debris to Earth-crossing orbits. Of the asteroids in this "well-placed" orbit, Hebe is the largest.
- An analysis of likely contributors to the Earth's meteorite flux places 6 Hebe at the top of the list, due to its position and relatively large size.



Evening Sky Map – below is courtesy of Skymaps.com.

www.Skymaps.com/downloads.html At the end of the month it changes to show the next month's chart.



Chocolate Oder Form

Chocolate Bars Case or 1/2 case (12 bars of 100 g = 1 case=\$45

	#of cases	Total
Milk Chocolate		
Milk Chocolate with sea salt		
Dark with Caramel Crunch 55%		
Dark Chocolate with Coconut (67%)		
Dark Chocolate (55% cocoa)		
Dark Chocolate with Almonds		
Dark Chocolate with Raspberries		
Espresso Dark Chocolate		
Orange Dark Chocolate		
Mint Dark Chocolate		
Bittersweet Chocolate (71% cocoa)		
Panama Extra Dark (80% cocoa)		
Dark Chocolate with Ginger (65%)		
Dark Chocolate -Chili and Spice (65%)		
Milk chocolate with Butterscotch and Sea salt		
Milk chocolate and Hazelnuts		
Baking Chocolate Bittersweet (71%) 10 bars 200 g each = 1 case buy whole (\$60) or 1/2 \$30		

Here are some **Snack bars**. For these, you have to order a full case of 20 bars. The cost is \$25.

Chocolate Snack Bars (20 bars of 32 g = 1 case) #of cases Total \$

Almonds & Raisins (55% cocoa) (NEW!)		
Milk Choc. /Puffed rice and quinoa (New)		

Hot Chocolate Tins (6 tins of 336 g = 1 case) Cost \$42/case # of cases Total \$

Milk Hot Chocolate		
Dark Hot Chocolate		
Chili Spice Hot Chocolate (No Dairy)		
Drinking Chocolate (No Dairy) \$42		

Use the tables above to order number of each that you want and email or mail the form or call in. You can pay now or pay when the chocolate arrives.

Order is due by November 6 so we can have the chocolate by the Holidays

Name _____ Phone# _____ email _____

Send to Sue shemphill@netbistro.com or phone 398 8532