Title of Session: Nuts About Nature - Humm(bird)ing Around Moderator: Bill Hilton Jr. Title of File: 20040810nanhummers Date: August 10, 2004

Room: Tree House Conference Room

BjB: Welcome to tonight's Nuts About Nature

TinaN: Hi everyone!

BjB: the topic is Humm(bird)ing Around

BjB: the discussion leader is Bill Hilton Jr. If you've never participated in one of Bill's sessions, you're in for a treat!

SrikrishnC: Hello all

BjB: let's start with brief introductions

BjB: I'm an art teacher in Pennsylvania

DavidWe joined the room.

SrikrishnC: I'm a 7th and 8th grade Science Teacher in Houston

GloriaMF: Hi, I am currently a student at the University of Houston. I live in Eagle Lake Texas

AmandaY: I'm a science teacher in Texas

TinaN: Hi ! I'm a preservice teacher at university of Houston, Texas.

BjB: Bill, looks like you have a great group tonight!

DavidWe: I'm David Weksler. I'm in New Jersey - I help teachers use technology in teaching and learning

BillHi: I'm Bill Hilton Jr., executive director of Hilton Pond Center for Piedmont Natural History in York, South Carolina. I taught high school and college biology for many years and now do a lot of preservice and inservice teacher training across the U.S.

GulbanuH joined the room.

DavidWe waves to Gulbanu

BillHi: Gulbanu, could you introduce yourself?

DavidWe: Gloria, I'm in Bergen County, up by NYC

BillHi: Our moderator is the famous BJ, Queen of Multitasking.

GulbanuH: Yes, David knows me I am a preservice science teacher

BjB hands the virtual floor over to Bill

GulbanuH: My major is Biology and I have done some things on birds

BillHi: Okay, greeting time is over. Let's get down to business. (-:

BillHi: I see that we have a large contingent from Texas, but what we're talking about pertains to all your regions.

SusanR joined the room.

BillHi: Here's how the discussion will go.

BillHi: Nuts About nature is intended to provide teachers with ideas and strategies for using natural history as a stimulus to excite kids about science learning.

BillHi: We also try to tie in the "unnatural" world of computers, the Internet, and electronic networking.

BillHi: As we roll along tonight, I'll ask some questions, and we'll see where the discussion leads us.

BillHi: I do have a few goals, but I'll let you figure out what those were when we finish! BillHi: Okay, here goes. BillHi: The topic tonight is "Humm(bird)ing Along." Any idea why I selected that for August? **DavidWe** waits expectantly GulbanuH: Maybe they migrate here in August BillHi: What mean's "here."? GulbanuH: I meant the birds are plenty in a region that you are talking about **BillHi**: Other ideas? AmandaY: Are they more active in the summer time in the US? DavidWe: H-bird migration to an area near you, Bill? GloriaMF: Bird season maybe BillHi: Remember, I mentioned that the discussion pertains to everyone's region. SrikrishnC: I go for heavy activity this time of year BillHi: Okay, these are all good ideas. GulbanuH: Some birds are endangered AmandaY: Do they mate in the summer instead of spring? BillHi: In actuality, August is "Nation Hummingbird Month" in the U.S. **GloriaMF**: Learn something new everyday. BillHi: The designation was created a few years ago by Nancy Newfield of Louisiana, a well-known hummingbird expert. GulbanuH: Why do you lay so much emphasis on this particular one BillHi: Stay with us Gulbanu. you'll understand in a minute. BillHi: As someone mentioned, there are lots of hummingbirds around in August. GulbanuH: Sure **BillHi**: Any idea why there are so many? **DavidWe**. o O (More nectar?) GulbanuH: More food **GloriaMF**: Flowers in bloom maybe SusanR: abundance of flowers **SrikrishnC**: Temps they like **DavidWe**. o O (Because it's National Hummingbird Month?) SrikrishnC: I like that GloriaMF: Good one David. BillHi: Don't encourage David. **DavidWe** smiles **DavidWe** sits in the corner SrikrishnC: facing the wall? GloriaMF: Dunce Cap on BillHi: Nice pointed cap. (-: **DavidWe** surrenders BillHi: Back to the question. BillHi: Do you think there are REALLY more flowers in August than in June or July? GloriaMF: No **SrikrishnC**: I wouldn't think so GulbanuH: No, I don't think so

BillHi: Then, how do we account for large numbers of hummers in August? **DavidWe** . o O (hatching young?)

BillHi: Right, David, you can come back out of the corner.

GulbanuH: Maybe they had stored food and are ready for breeding

BillHi: Nope, they don't store food.

GloriaMF: Mating season

DavidWe thanks Bill for his tolerance and understanding as a teacher

BillHi: It's over, but it was the cause.

SrikrishnC: Precipitation amounts

BillHi: Not rainfall.

BillHi: For the sake of tonight's discussion, I'd like to concentrate on just one species of hummer--the Ruby-throated hummingbird.

BillHi: The abbreviation for that species is RTHU.

SusanR. o O (maybe they need to gather nectar to gain as much weight as possible before they migrate)

BillHi: That doesn't explain why the population is so big.

TinaN: It's the end of summer?

JeffC joined the room.

BillHi: RTHUs spend the winter in Mexico and Central America. they migrate to 38 U.S. states and southern Canada to breed, starting in late March.

BillHi: They're found east of the Great Plains, including eastern Texas.

GulbanuH: High rate of breeding might be due to some favourable conditions

BillHi: But even in normal years there are lots more birds in August.

GulbanuH: So, you mean migration is the cause

SrikrishnC: So David wasn't correct

DavidWe heads back to the corner

BillHi: No, David WAS correct. After mating, the female lays two eggs that hatch. The chicks start fledging in about mid-June, and the numbers continue to build until late summer.

DavidWe sighs

BillHi: This is because the adults are still around AND the young birds of the year are still here also.

GloriaMF: David pat yourself on your back good job

DavidWe listens attentively to Bill

GulbanuH: great job! David

GloriaMF: waiting patiently

BillHi: So the population is at its largest during August, because by the end of the month many RTHUs are already starting to migrate south.

BillHi: Nearly all are gone by September's end.

DavidWe wonders what kind of numbers we are talking about

BillHi: So it wouldn't be very wise to call October "National Hummingbird Month,"

unless you happen to live in Coast Rica!

GulbanuH: So we celebrate their abundance in August

BillHi: You got it, Gulbanu.

BillHi: The numbers are all relative; I can't give you actual populations sizes because the hummers are too small to count!

GulbanuH: And too cute too BillHi: Which is one reason why I trap and band RTHUs--to try to get an idea of local population sizes. **GloriaMF**: How did you do that? **BillHi**: I'll explain that shortly. BillHi: A question first. BillHi: Any idea why we don't call it "International Hummingbird Month." GulbanuH: Because it pertains to our region **SrikrishnC**: They are mostly in the US JeffC: Because talking about hummers for that long would cause outrageous laughter in the classrooms. BillHi: Define "region." GloriaMF: Maybe because it does not pertain to other regions AmandaY: The h-birds are mostly in the US in August **TinaN**: Because throughout the year, hummingbirds migrate to different parts of the world BillHi: Define "world." **GloriaMF**: Countries GulbanuH: They migrate north in winter **BjB**: north and central America, Tina BillHi: Here's a hint. Where do hummingbirds occur? BillHi: Not just RTHUs. **SrikrishnC**: In the Americas BillHi: Anyone else? GloriaMF: I agree with Srikrishn. GulbanuH: You just said they are migrating from Mexico BillHi: That's just the RTHUs we were talking about. **BillHi**: Anyone else? SrikrishnC: The highest abundance in the US is August **BiB** searches the hummingbird page **SrikrishnC**: Higher other places at other times **BillHi: NO CHEATING, BJ! BiB** laughs BillHi: I'm trying to be Socratic here and draw knowledge from within--not from the Internet. **BjB**: ahhhh...good point. GulbanuH: There, I like that **BillHi**: Well, Srikrishn is correct. BillHi: Hummingbirds occur only in the Americas--North, Central, and South. BillHi: There are none in Europe, Asia, Africa, Australia, or the Polar Regions. **GloriaMF**: Interesting! SrikrishnC: Lucky guess TinaN: I never knew that. GulbanuH: Thank you for the information DavidWe: Anyone speculate on why?

BillHi: If you go to see a move about Tarzan, Lord of the Apes, and there's a hummingbird hovering over his shoulder, what can you conclude? **SrikrishnC**: Can't travel those distances **JeffC**: They're in Hollywood? **TinaN**: it was filmed in America BillHi: Cool, Jeff. GulbanuH: I agree with Tina **GloriaMF**: Filmed in the US **AmandaY**: Interesting SrikrishnC: Poor editing BillHi: Perhaps it was filmed in the Amazon jungle rather than in an African one. AmandaY: So why are h-birds in other parts of the world? Did they die of extinction in those areas? BillHi: I just returned from an international conference in Boulder that was attended by folks from places like Thailand, Germany, India, etc. **DavidWe** . o O (cool!) BillHi: All of them were astounded when I showed them some Colorado hummingbirds at a feeder in the Rocky mountains. BillHi: Most of them don't even have words for "hummingbird." GloriaMF: They've never seen one before. SrikrishnC: neat **GloriaMF**: Even in pictures. GulbanuH: I am from Pakistan, and I only read about them in books BillHi: Correct. It was their first encounter. Their countries may host nectar-eating birds that fill a similar niche, but none of those other species can hover like hummingbirds. SrikrishnC: Are they similar size wise BillHi: No, larger. Hummers are pretty small. BillHi: Let's go back to Amanda's question. GulbanuH: Can you tell us more about the behaviour BillHi: How can we explain the absence of hummers elsewhere in the world? SrikrishnC: They couldn't travel those distances **BillHi**: From where? **GloriaMF**: Too small for travel **AmandaY**: Died off, wrong climate (temp, moisture, food sources) SrikrishnC: From the Americas? BillHi: There are 338 species of hummingbirds in the Western Hemisphere. GulbanuH: May be the conditions are so good for them they don't need to migrate **BillHi**: It's not migration if you go elsewhere and stay; it's dispersal. BillHi: Actually, those of you who say it's "too far" are correct. **GloriaMF**: Maybe they need a certain type of atmosphere to survive. GulbanuH: But you leave your native place if you have some problems **DavidWe**. o O (predators) **BillHi**: Hummingbirds apparently arose in the New World tropics and radiated into North and South America. **BillHi**: They couldn't go any further north or south because . . . (your guess?) **TinaN**: the weather

SrikrishnC: They can't fly long distances without land to stop on BillHi: I'm asking about north and south. AmandaY: too cold SrikrishnC: sorry SrikrishnC: weather BillHi: Tina's at least partly right. **BillHi**: Too cold for what? AmandaY: No food **BillHi**: What food? SrikrishnC: incubating GulbanuH: Maybe their young die on the way **BjB** chuckles...this guy is tough! AmandaY: plants and insects AmandaY: insects **DavidWe**. o O (nectar) BillHi: We already established that hummingbirds are nectar eaters. **JeffC**: maybe they're a delicacy... and it takes quite a few to make hummingbird pie. BillHi: Are there any flowers in the polar regions? (-: DavidWe pokes Jeff BillHi: I'll ignore Jeff; you should, too. GulbanuH: Oh No SrikrishnC: no JeffC ignores himself AmandaY: Do they [like] all flowers or only certain kinds of flowers? BillHi: Curiously, those of you who said insects are also correct. **BjB**. o O (as pollinators?) BillHi: Any idea of why hummers might need to eat tiny insects? SrikrishnC: protein AmandaY: protein BillHi: And. **GulbanuH**: It is high protein and small BillHi: Protein and . . . **SrikrishnC**: feed their young **DavidWe**. o O (other essential nutrients) **JeffC**: their beaks are too small for big ones? GloriaMF: Not enough nectar BillHi: Protein and . . . AmandaY: easy to find near flowers **BiB**: do hummers have gullets? **BillHi**: Insects contain protein and ...? **DavidWe** . o O (fat) **BillHi**: FAT! BillHi: Every squish a bug on the pavement? SrikrishnC: David...David JeffC: ding ding ling! we have a winner! DavidWe grins

BillHi: It's pretty greasy, which mans it's fat. BillHi: So hummers get carbs from nectar and fats and proteins from insects. **DavidWe** . o O (a well-balanced diet) **GloriaMF**: Interesting! **GulbanuH**: That is a neat point BillHi: Neither insects or flowers occur in the polar regions. **GloriaMF**: They also need their protein, carbs, and fats. BillHi: And, as someone has said, the Atlantic and pacific Oceans are to wide for hummers to fly across. **DavidWe** . o O (southern Alaska, Aleutians, Bering Straight?) BillHi: Thus, they're pretty much isolated to where they originated--tropical and temperate America. **DavidWe**: Do they get to Alaska? GulbanuH: So we have the glory of them **BillHi**: So, if you were BJ and liked to cheat during the discussion, where could you go for these kinds of answers? SrikrishnC: Hilton Pond website BillHi: The answer is, the Web site for "Operation RubyThroat: The Hummingbird Project" at http://www.rubythroat.org **BillHi**: Let's go there now! GulbanuH: Well right now internet is my only source **BillHi**: Click on the hyperlnk above and WAIT for me on the homepage. **BillHi**: WAIT! **BillHi**: ON THE HOMEPAGE! **BillHi**: Everybody there? **BjB** Nods SrikrishnC: yes **DavidWe** nods GulbanuH: yes **BiB**: we only have a few more minutes, Bill...don't want to take advantage of your generosity **BillHi**: This is the world's biggest and most comprehensive hummingbird Web site. TinaN: I am **SusanR**. o O (wants to click on Ruby Throated Hummers in Canada) **BillHi**: Scroll down the main page to the "on-l BillHi: "on-line search engine" box. BillHi: Type in the word "migration" SrikrishnC: on-line or on-site BillHi: On-site. We're interested in the Operation RubyThroat offerings. BillHi: Hit "GO." SrikrishnC: thanks **BillHi**: As you can see, there are lots of entries. Click on one that looks interesting. BillHi: Any comments about what you found? GloriaMF: Interesting website. **BillHi**: Thanks. SrikrishnC: lots of info

GloriaMF: Have to go. Had fun.

BillHi: My point is that I hope you will bookmark <u>http://www.rubythroat.org</u> and go back and visit it between now and Labor day as you celebrate NATIONAL HUMMINGBIRD MONTH!

GloriaMF: I will.

DavidWe thanks Bill for a great presentation

BillHi: There's also hummingbird info on my site for Hilton Pond Center for Piedmont Natural History at <u>http://www.hiltonpond.org</u>

BjB. o O (which includes a marvelous newsletter!)

SrikrishnC: can do...thanks for the information and time

BillHi: Thaks for your input. The evening went VERY fast--almost as fast as a hummingbird flies.

BjB hugs Bill. Get some rest....see you on Saturday

GloriaMF left the room (signed off).

BjB hopes everyone is jealous

SrikrishnC: it did go really quickly

TinaN: Thanks Bill.. It was interesting..

AmandaY: Thanks Bill

SrikrishnC: Thanks again

SusanR: Thanks Bill! Hope to see some in my neck of the woods, Ontario.

BillHi: You find a sponsor, and I will come.

BillHi: Any closing questions?

DavidWe: Do hummingbirds get to Alaska?

BillHi: Jeff, hummers actually do make good hors d'oeuvres. They come with a built-in toothpick. (-:

DavidWe smiles

BjB groans

SusanR grins

DavidWe . o O (more than four and twenty, right Jeff?)

BillHi: David, Rufous hummingbirds do breed in extreme southern Alaska and in western Canada and the NW U.S.

DavidWe wonders if anyone has though about introducing hummingbirds to places like Thailand

SusanR: Why does a hummingbird hum?

SusanR: Because it doesn't know the words!

DavidWe: ba-doom, chsh!

BillHi: http://www.rubythroat.org/OtherRufousMain.html

BillHi: There's a search engine box on every page of the Operation RubyThroat web site. **DavidWe** nods

SusanR . o O (glad you pointed out the search engine)

BillHi: I hope no one ever seriously thinks about exporting hummingbirds. No sense upsetting someone else's ecological balance.

BjB sends Bill off to get some rest

BjB: thanks, Bill, for a great discussion

BillHi: Night, all.

BillHi left the room (signed off).