That is right—counts, plural. There will be 2 CBC’s (Christmas Bird Count) in Kittitas County. The first official Cle Elum Christmas Bird Count will be held this year. There was a test run last year. This year the data will be submitted to Cornell Lab of Ornithology. It will join the data from the Ellensburg data and that of 2060 other counts.

“Why?” is the question I get the most often. Other than questioning my sanity for spending the entire day driving, hiking and generally wandering around in a 15 mile circle in what can be some pretty challenging weather, my friends and family really do want to know.

1.) First it really is fun. Foggy or clear and cold, it is still a treasure hunt or maybe better described as a scavenger hunt with that pesky list.

2.) The data really is used. After last years disaster with Evening Grosbeaks, would you like to know how the species is doing in general? There is study “Population Trends in Evening Grosbeaks.” You can access the data by going to the website www.audubon.org/bird/cbc/. Or are you curious if global warming is having an effect on bird populations? Cornell is studying that, a short summary can be found at www.birds.cornell.edu/publications/birdscope/winter2003/Why_Count_Birds.html along with a bit of information about how the CBC is used to analyze the trends in West Nile virus.

So if you would like to join the fun:
Cle Elum CBC is on Thursday Dec. 14th. Contact Michael Hobbs birdmarymoor@verizon.net
Ellensburg count is on Saturday Dec 16th Call Phil Mattocks for details (509) 962-2191

For the history of the CBC—see page 8.
Cricket Webb.

**Bird of the month**

WOOD DUCK  *Anatidae Anatinae Aix sponsa.*

The Wood Duck is a common bird of riparian habitats, wooded swamps, and freshwater marshes. It is also the most successful of the seven species of North American ducks that regularly nest in natural cavities. The Wood Duck boxes and increased beaver activity have contributed to the recovery of population that had declined prior to the Migratory Bird treaty and restrictions on harvests.

This small to medium size ducks are difficult to mistake for anything else. Male’s distinctive facial pattern (iridescent green and purple head; white throat with fingerlike extensions onto cheek and neck; red eye; long green, purple, and white crest; and burgundy breast) and overall colorful plumage are part of makes this a favorite for birders. For a pleasant change the female, with the very prominent white

Photo by Tom Gauron
**December 2nd First Saturday BirdWalk:**
Meet at 8:00 AM at Irene Riverfront Park parking lot and join us for about a two and a half hour walk. Since the gate to the lake should be closed we may start seeing more waterfowl.

**December 14th:** Cle Elum Christmas Bird Count: 
Email Michael Hobbs birdmarymoor@verizon.net

**December 16th:** Ellensburg Christmas Bird Count: Call Phil Mattocks for details (509) 962-2191

**January 6th, 2007:** First Saturday BirdWalk before we could get out. Providing great close-up looks of the colorful Wood Ducks, it just could not get any better.

After lunch we headed for home up the Yakima Canyon hoping to see other wildlife. It was not long before we started finding Bighorn Sheep, guessing we spied over a 125, plus rabbit and deer. We stopped at the ponds south of town and added a few more species--Common Golden-eye, Bufflehead, and Ring-necked Ducks, for a day’s total of 39 species. Just a wonderful day of birding!}

**KAS Field Trip Nov. 18th**
At this time of year it is not always easy to choose where to go because of weather conditions. Therefore, three cars with eleven birders headed south to the **Yakima Greenway**--always warmer with excellent riparian habitat. It was in the low 30’s and quiet as we sauntered along the Popoff Trail. As the weather warmed so did the birds. By the time we met the main trail someone must have opened the door because there were birds everywhere, both species and numbers. First, a Great Horned Owl, followed by Ruby-crowned Kinglets, Yellow-rumped Warblers, Cedar Waxwings, Varied Thrushes, American Robins, Spotted Towhees, Black-capped Chickadees and three Bewick’s Wrens--all while we walked about 30 feet on the main Greenway Trail.

By the time we returned to the cars it was lunchtime so we ‘coffeed-up’ and headed to Sportsman’s Park to find a table. As we passed the second of the ponds in the park we were mobbed by the fowl that wanted to be fed. As many as 150 or more, Mallards (and mallard crosses), American Wigeon, Wood Ducks, and some domestic geese literally ran for our cars, surrounding us before we could get out. Providing great close-up looks of the colorful Wood Ducks, it just could not get any better.

After lunch we headed for home up the Yakima Canyon hoping to see other wildlife. It was not long before we started finding Bighorn Sheep, guessing we spied over a 125, plus rabbit and deer. We stopped at the ponds south of town and added a few more species--Common Golden-eye, Bufflehead, and Ring-necked Ducks, for a day’s total of 39 species. Just a wonderful day of birding!  

Jeb Baldi

Photo of Steve Moore & Jan Demorest
By Diane Gauron
Thanksgiving is again upon us with Christmas around the corner, a time when we often reflect on the past year and the things for which we are thankful. Family, friends, the opportunity to travel close to home and afar, good health, a comfortable home, a town rich in history and congeniality, a college that offers culture and information, habitat to explore and wilderness to hike—and the list could go on—all add to make life in the Kittitas Valley truly enjoyable. And yet worried concern continues to work its way into my life.

This week was an article in the Daily Record entitled "Global warming killing some species", which states the unexpected changes that are occurring so rapidly. The slightly higher temperatures are putting to extinction some smaller animals, up to 70 species of mountain-dwelling frogs, with between 100-200 other cold-dependent animal species, including penguins and polar bears in deep trouble. Cold dependent species have nowhere to go. Earlier springs mean plants mature earlier, with migrating birds food supply available earlier. Will the birds adapt? Possibly some will, while others will not.

Another extensive report in The Seattle Post-Intelligencer the week of October 9th states the condition of Puget Sound where contamination has literally killed life in the southern section—and it is spreading. The Orcas, shellfish, fish, and the entire food chain show PBC, mercury and other pollutants in their tissues. For ten years any clean-up that has occurred has been replaced by more contaminants.

One can almost see the diminishing of species as human population increases with insatiable appetites for an ever-higher standard of living. Some reports indicate that we may not be able to turn the trend. Any child less than twenty years of age will see a world devoid of many species we have been privileged to see.

So although there are many reasons to give thanks this season, there are also many reasons to be concerned about the future. We can do actions as individuals, but can everybody sacrifice? Time will tell.

So, even though concern for earth is all around us, take time to enjoy many walks someplace in our beautiful Kittitas County this holiday season. Gloria Baldi

Northern Spotted Owl (NSO) Update

The Spotted Owl is a shy bird, very specialized, nests in old growth forest, and has a diet mainly of flying squirrels. It has decreased at the alarming rate of 40-60 percent in the past ten years, and the Teanaway area in our own county is an area where the decrease is most severe. Therefore, Kittitas Audubon has combined with Seattle Audubon to push for further protections for the Spotted Owl, both at the federal level and at the Washington State level.

When the Owl was listed as endangered in the 1990’s, the Endangered Species Act mandates that a recovery plan be adopted by the Federal Government (USFWS). Instead of a Spotted Owl Recovery Plan the NW Forest Plan was adopted placing the burden for recovery solely on Federal lands. Ten years later we find that the NSO population has declined by 50% from the time the owl was listed.

In the last quarter of 2005 Kittitas and Seattle Audubon chapters filed suit against the USFWS asking them to complete and adopt an NSO recovery plan. That process is now under way and the plan will be released for public comment in the near future. While the Audubon chapters were only one cog in the wheel that brought this about, we do have a seat at the table with 2 conservation people (one from our state office and one from Oregon) on the team writing the plan. Politics is a major portion of the negotiations.

At the State level, the Forest Practices Board (FPB) and the Department of Natural Resources are responsible for owls on state and private land. Earlier this year the Washington Environmental Council successfully negotiated the protection of large blocks of NSO habitat on state lands. We thank them for their hard work and diligence.

Kittitas and Seattle Audubon have been in negotiations with the Forest Practices Board for several years to provide better protection for owl habitat on private lands. In particular we have been working to protect owls that have no protections at all under the State rules. This culminated last summer with a series of hearings and some minor changes to the Washington State Owl Rule.

At that time the FPB made us aware that they would not be doing any more changes to the owl rule. Since no substantive changes were made Kittitas and Seattle Audubon moved forward with filing suit against the State which allows "take" of NSO with their rule and Weyerhauser for "take". In early November that suit was filed. Shortly after we filed an injunction with the court asking that logging be prevented in the NSO habitat specified in the suit. And now we wait....

"Take" is a legal term from the Endangered Species Act dealing with causing harm to a listed species.

For more information about the Northern Spotted Owl visit the Seattle Audubon webpage: www.seattleaudubon.org/who-we-are.cfm?id=785

For more information about the Washington State Owl Rule visit the Forest Practices Board webpage: www.dnr.wa.gov/forestpractices. You will have to search for spotted owl to find information.

Beth Rogers
eye ring, while nowhere near a flamboyant as the male it is still quite distinctive. Males in Basic (Eclipse) plumage and juveniles resemble adult females. Although not a common duck in North America, the Mandarin Duck is similar in appearance. *

Breeding. Pair formation begins in late summer and fall so the pair bond is well established by the following spring. The male tags along while the female selects the cavity they will use for the nest. Two broods are usual, but based on season length. More common in the south of the breeding range. Second clutch is typically smaller than the first.

Ducklings are precocial and downy. They leave the nest by jumping out about 24 hours after hatching. The whole clutch hatches in 6—8 hours. Mother duck leads them to the rearing area, some distance from the nest box. This can be up to a mile away. More independent than other breeds of ducks, the hatchlings have juvenile plumage and many able to fly within 2 months.

When selecting the bird of the month, I prefer to mix it up. So why 2 ducks in a row? Our experience on the field trip. At Popoff trail there was a pair serenely gliding across a mirror topped pond, the ultimate perfect view of Wood Ducks. Then we got to Sportsmans park and they were almost a cliché for a clown. In their multi color garb, racing (wobble wobble wobble) toward our cars. How could I resist?

Cricket Webb All data gathered from Sibley Bird Life
an Behavior or Birds of North America Online.

* Mandarin Ducks (Aix galericulata) have established a free living breeding population in California. They have not yet been added to the American Ornithologist’s Union check list.

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### Conservation issue!!!

Are you familiar with the Naneum, the Coleman, the Colockum? All of these areas, and more, are being affected as the Department of Natural Resources (DNR) attempts a series of land exchanges. The WA Department of Wildlife , Western Pacific Timber (formerly Boise-Cascade), and two smaller entities are working with the DNR to attempt to combine checkerboard sections of land to make large block areas for future effective landscape management. KAS supports this concept, and the exchanges in the areas mentioned would benefit habitat for wildlife, as well as, Kittitas County. If you are interested in this issue, there is an informational meeting at Hal Holmes Center on November 29th at 6:30 PM. Letters of support are needed so do plan to attend.

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### Ivory bill update

In the latest "BIRDSCOPE" bulletin that comes with "THE LIVING BIRD" magazine, there is a recap of the recent probable Ivory-billed Woodpecker sightings in the Florida panhandle. That location is quite close to the Eglin AFB, with its groves of (off limits) old-growth Pines. Since the Ivory-bills of the olden days foraged in virgin pines, I think old pine groves (now a rarity) within range should be watched.

But what really interested me was the little article on DNA testing of both the Ivory-bill and the Cuban Ivory-bill. It concludes that those subspecies have been geographically separated for a million years, and that they are really two different species! But the basic question still remains: how did it get to Cuba in the first place. The article didn't mention any DNA tests of the Imperial Woodpecker.

Vol. 20, N0. 4 (Cornell Lab of Ornithology: BIRDSCOPE).

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With a day to spare near Elko, Nevada in early November, the two of us, former Elkoites, plus Beth, a local friend, head for the Ruby marshes, a unique wetland an hour-plus distant. We drive south, paralleling the rugged Ruby Mountain skyline, then cross over at Harrison Pass and descend to flat-bottomed Ruby Valley, at 6000 ft elevation. With 4000 more feet of relief from basin to mountaintop, abundant springs pour forth onto the valley floor creating 17,000 acres of wetlands, officially Ruby Lake NWR (read more at www.fws.gov/refuges/profiles/index.cfm?id=14570). It’s a paradise for fishermen, hunters, and birders. We’ve visited in other seasons but wondered what we might see on a chilly Fall day.

On the way, a half dozen Golden eagles sit stolidly on power poles, “little heads on big tapered bodies.” Waiting for a thermal or digesting breakfast? One pole hosts a pair. Less edgy than Redtails, they let us stop on the shoulder and take photos. In Ruby Valley, some poles and fence posts are topped by Rough-legged hawks - “light head, dark glasses” - our first sightings this season. At one stop we also spot a coyote foraging through sage.

In sight of the marshes we spot groups of ducks, but they all scurry or bolt as we pull out onto the dikes that give access to the marshes. It’s hunting season! Today, our duck identifications will have to be rapid, distant, or guessed! Among the far groups we tally Mallards, Shovelers, Buffleheads, Ruddy ducks, Pintails, Goldeneye, Cinnamon Teal, and Mergansers. Missed some others, we’re sure. Way out there, three swans and cautious groups of Canada geese. Plenty of oblivious Coots, and a fair number of Eared and Pied-billed Grebes that are also less shy than the ducks.

Little birds: few this time of year at this altitude, but we hear an occasional hidden marsh wren and spot disappearing sparrows. In season, there will be a cacophony of blackbirds and wrens in the bulrushes. And picture it in May: aerial squadrons of ducks, glossy ibis and black-necked stilt, many other waders and sand-hill cranes, lone cruisers like Caspian terns, short-eared owls and falcons, and uncountable rafts of breeding waterfowl. The cruisers we see today are Northern harriers, about 20, mostly rusty juveniles kiting over the reeds. Since there aren’t baby ducks any more, we guess they’re looking for rodents.

Two memorable sightings make it an extra-special day to remember. Jan spots a dark critter caterpillar through a mown hayfield at the edge of the marshes: too hunched for a coyote! With binox, it’s a badger, and we watch him for some time working his way through the golden grass, stopping to throw up sprays of soft dark earth a few times. Those bold white and black facial stripe patterns, brown underneath and in back, and a gray coat that brindles in the breeze. The other vision lasts just seconds: from a canal deserted by ducks there’s a sudden flush right beside the truck, and power and grace in a winged departure. Jan spots “chartreuse legs” – it’s an American bittern saying “hello-goodbye”.

Steve Moore & Jan Demorest
(photos by Beth Carpel)
Solar power is the basis for all life on earth! Solar heating has been used for thousands of years to warm dwellings. But solar electricity (photovoltaics) is a very new industry. In the last few decades since we began to investigate using solar power to generate electricity a great deal has been learned. In order to condense the information available to the space on this page, I will be limiting the scope of this to photovoltaic.

Solar radiation reaches the Earth’s upper atmosphere at a rate of 1,366 watts per square meter (W/m²). Factors such as latitude, time of year, weather phenomena reflection, absorption, atmospheric conditions and weather phenomena will reduce the energy available at ground level. For example, in North America the average insolation lies between 125 and 375 W/m² (3 to 9 kWh/m²/day). This is the available power, and not the delivered power. Photovoltaic panels currently convert about 15% of incident sunlight into electricity; therefore, a solar panel in the contiguous United States on average delivers 19 to 56 W/m² or 0.45-1.35 kWh/m²/day. While average insolation and power values offer insight into solar power’s potential on a regional scale, locally relevant conditions need to be assessed to determine the solar potential of a specific site.

The hardest figure to tease out of the data is how much do we use. The best I can tell, the average house uses about 500 kWh per month. That fits with my own usage (based on my bills.) At .9 kWh/m²/day I would need a little more than 18 sq meters of solar panels to power my house or a flat panel array 20 ft wide and 10 ft high.

Hey – that actually sounds possible!

How do these photovoltaic solar panels work? Photons in sunlight hit the solar panel and are absorbed by semi conducting materials, such as silicon.

Electrons (negatively charged) are knocked loose from their atoms, allowing them to flow through the material to produce electricity. The complementary positive charges that are also created (like bubbles) are called holes and flow in the direction opposite of the electrons in a silicon solar panel.

An array of solar panels converts solar energy into a usable amount of direct current (DC) electricity. The DC current enters an inverter. The inverter turns DC electricity into 120 or 240-volt AC (alternating current) electricity needed for home appliances. The AC power enters the utility panel in the house. The electricity is then distributed to appliances or lights in the house. The electricity that is not used will be recycled and reused in other facilities using the power grid.

Net metering measures the difference between the electricity you buy from your utility and the electricity you produce with your solar energy system. Under net metering, any excess electricity produced by your solar energy system is delivered back into the utility grid, effectively spinning your meter backwards. Your meter spins forward when your solar energy system is not producing all of the electricity you are currently using. Your electric meter keeps track of this net difference as you generate electricity and take electricity from the utility grid. Not all states require the utilities to use net metering but Washington does have an established net metering rate.

Is this THE answer? NO. It may be a possibility for some of us here in the Kittitas valley. How much sun you get at you location and how much a solar array of adequate size are all issues that have to looked at by each household.

I have noticed a new solar array along side of I90. Anyone know who has installed that one?

Disclaimer: Some of the data for this article came from the General Electric web page. I am a GE employee but in the health care division. None of this data is privilege. All is from public web sites.

Cricket Webb.
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Kittitas Audubon Membership includes a subscription to the monthly Hooter, and the opportunity to support local activities for $20.00 per year.

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### DONATIONS

Donations are appreciated and give you the opportunity to further support and fund KAS Chapter activities. If you have a National Audubon membership, donations are especially important since KAS no longer receives a portion of your National Membership dues to defray cost for the Hooter.

$15.00 American Goldfinch  $100.00 Great Blue Heron

$ 50.00 Red-tailed Hawk  Other - Donations in any amount are appreciated

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Membership forms are also available on ourWeb site Kittitasaudubon.org.

Webmaster – Mark Whitesell  Email markwhitesell@hotmail.com
This year will mark the 106th annual Christmas Bird Count. The Christmas Bird Count is a census of all the birds in a given area. All of the counts over time have helped us understand the migratory ranges of birds and how many there are now. Have they declined or expanded their range? Each count area is a 15 mile wide circle. The circle is divided up into pie wedges. Teams try to count all the birds in their area without counting the same bird twice. This requires a minimum of 2 people (all sightings and ID’s need to be verified) but more the more eyes the better.

A quick review the history for those who are not aware that this single action has such a long history and important purpose. Prior to the turn of the century, people engaged in a holiday tradition known as the Christmas "Side Hunt": They would choose sides and go afield with their guns; whoever brought in the biggest pile of feathered (and furred) quarry won. Conservation was in its beginning stages around the turn of the 20th century, and many observers and scientists were becoming concerned about declining bird populations. Beginning on Christmas Day 1900, ornithologist Frank Chapman, an early officer in the then budding Audubon Society, proposed a new holiday tradition-a "Christmas Bird Census"-that would count birds in the holidays rather than hunt them. So began the Christmas Bird Count. Thanks to the inspiration of Frank M. Chapman and the enthusiasm of twenty-seven dedicated birders, twenty-five Christmas Bird Counts were held that day. The locations ranged from Toronto, Ontario to Pacific Grove, California with most counts in or near the population centers of northeastern North America. Those original 27 Christmas Bird Counters tallied a total of 90 species on all the counts combined.

Last year, in Kittitas county alone, 30 individuals counted 19,432 total birds from 81 species. I wonder what the total will be this year.

The mission of Kittitas Audubon Society is to develop an appreciation of nature through education and conservation, with a focus on birds. The goal for KAS is a vibrant active organization recognized in Kittitas county.

Kittitas Audubon Society
P.O. Box 1443
Ellensburg WA 98926
Http://www.kittitasaudubon.org