## **Irruption Excitement**

In the world of North American birding, "irruption" refers to a winter in which northern, boreal species are pushed southwards to find food. This happens when there is a poor seed crop in Canada. It is an infrequent event, but we are now in the winter of such a year. If you have functioning feeders, it will serve you well to keep a sharper eye open for boreal species, most of which are in the finch family. Several years may pass before these birds come south again.

**Nuthatches:** One non-finch is the attractive cousin to our resident White-breasted Nuthatch, the **Red-breasted Nuthatch**. These nuthatches prefer spruce and fir forests, and so are found in the Berkshires and White Mountains locally. "Fir tree" here is a reference to trees in the same family as the balsam fir that we see in Christmas tree lots, but not growing naturally in eastern Massachusetts.



Red-breasted Nuthatch

This year the Redbreasted Nuthatches are around Newton in large numbers. One good way to locate them, other than watching them come to your feeders, is to listen for them in our open spaces, such as Nahanton and Cold Spring Park,

Dolan Pond, and in the coniferous woods along the Charles River in Auburndale. Their calls are shorter and more nasal sounding than our larger White-breasted Nuthatches. Their vocalizations are often described as "yank-yank" noises. They usually call more repeatedly than our resident nuthatches. One site on the web where their calls can be heard is https://birdsna.org/Species-Account/bna/species/rebnut/introduction.

As you see, these birds are seriously cute. They crawl up and down vertical tree trunks as well as along branches, calling and gleaning insects as they go. They are often in small groups, a pair or three. They may hang out with a flock of Black-capped Chickadees, Tufted Titmice, and our resident nuthatches, which know the locations of the good, local food sources. In conifers these nuthatches will often

feed near the ends of branches, in clusters of cones where they probe and eat the seeds.

Finches: Among the finches we are seeing in greater numbers is the **Purple Finch**. These



Purple Finch

birds resemble our resident House Finches. The older males are much more deeply red-purple than the House Finches. They have a pronounced red head over their eye and no brown streaking below their wings, as House Finches do. Male House Finches also have brown in their faces, around and below the level of their eyes. Male Purple Finches have a dark patch behind the eye, but are much redder in the face, with no brown there.

The first year male Purple Finches have the same plumage as the females and are brown, streaky birds, like sparrows. The way to pick out the female Purple Finches is to look for the large white "supercilium," the white line over their eyes. This takes the place of the red over the eyes of the older males. If you have House Finches coming to your feeders, watch for the colorful outlier among them. These birds do breed in Massachusetts but not in Newton. They breed on Plum Island to our north, for instance. You might see them on a walk or at your feeders this winter.

**Redpolls:** A third boreal species is the exquisite little **Common Redpoll**. These look like little sparrows until you look closely and notice the brilliant red forehead and the dark area around the beak. They have a much frostier



Common Redpoll

look than sparrows. They might come to thistle feeders, especially if the seed is spilled onto the ground underneath the feeder. They also love to eat the catkins of birch trees. So if you walk in an area where there is a grove of birch trees this winter, keep an eye out

and an ear open. Their calls are somewhat like American Goldfinch calls but are more rolling and often occur as a group cacophony. Goldfinches are more solitary callers.

The Common Redpolls nest in the far north, from the southern end of Hudson Bay in Ontario, across northern Canada and into the northern half of Alaska. During most winters, the farthest south they get is the northern tier of the United States.

Crossbills: Another couple of species that are around Massachusetts this year are the Red Crossbills and the White-winged Crossbills. These birds have beaks that appear to be deformed. The upper and lower mandibles are crossed, and they use these unusual beaks to expertly and efficiently extract seeds from the cones of evergreen trees. They grasp a cone like a parrot might grab a piece of fruit, and wrestle the seeds out. They end up in contorted positions as they focus on extracting seeds.

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Red Crossbill

The **Red Crossbills** fascinated Charles Darwin as there are three closely related species in Europe. The different species have slightly different beaks and favor different types of cones. Darwin was interested in them as examples of a single species that had recently evolved into three species. In North America we still have most of them classified as subspecies rather than distinct species. The American Ornithological union has recently

decided that the one subspecies found in southern Idaho should be viewed as a separate species, the **Cassia Crossbill**.

The different Red Crossbill subspecies cannot be reliably separated visually. One must record their calls to identify them. This can be done with the video on a smartphone. We have 11 different subspecies, if you include the Cassia Crossbills, in North America. These birds may fare well in an era of climate change, as they have so many adaptations to different food sources. If climate change causes evolutionary stresses on populations of Red Crossbills, their ability to modify their beaks will be a distinct advantage.

The White-winged Crossbills have a much more uniform genetic makeup. There is only one species in North America. There is also just one species in Eurasia, in contrast to the Red Crossbills. They are very nomadic and move large distances to find plentiful cone crops of spruce, tamarack, and hemlock. Because of this behavior, we might see lots of them in January and none in February. Down south here in Newton they will also eat white pine seeds. These birds will breed at any time of year, only depending on whether there is a big enough local cone crop to nourish the female in producing eggs and raising the young.

The crossed beaks are great for prying cone scales apart and then gaining access to the seeds at the bases of the scales. This is a disadvantage in eating the seeds of grasses and sedges. White-winged Crossbills do eat these other seeds but are much less efficient at this activity than the more ordinary finches like American Goldfinches, Dark-eyed Juncos, and House Finches.

## Pine Grosbeak:

Yet another boreal finch that is being seen in Massachusetts this year is the larger **Pine Grosbeak**. These birds are seen

less than the other



Pine Grosbeak Male



Pine Grosbeak Female

birds mentioned here as they are more northern in their breeding habitat and tend to overwinter in the same general latitude as their breeding places. They are quite tame when you do see them. They take no notice of humans walking close to them to take pictures. They will

eat fruits like crabapples as well as mountain ash fruits, birch catkins and rose hips. They have a varied diet and so are less likely to be forced southwards by a scarcity of one sort of food. They are primarily vegetarians. Even though they are called grosbeaks, they are not closely related to our colorful Rose-breasted Grosbeaks, which are with us during the summer months. The red bird below bottom left, is a male; the gray bird above is a female eating local crabapples.

**Evening Grosbeak:** A final boreal finch for us to mention is here in Massachusetts this winter, the **Evening Grosbeak**. These are striking gray and yellow birds. The males resemble a large goldfinch. You can see in the photo that the name grosbeak is quite apt.

Note the yellow supercilium over the eye of the male and his big, white wing-patch. This picture was taken in eastern Massachusetts during November. There were as many as 50 of these grosbeaks coming



Adult Evening Grosbeak Male

to some feeders where they will often go to the area under the feeders and eat seeds there. Up in the nearby trees they will eat buds at the end of the branches and insects, if they can find them. In flocks they have a buzzy, quiet call note that might be described as "sheer." They breed north of us and will stay as resident birds in those latitudes as long as there is ample food. This year, however, there is a shortage of food up north.

Enjoy a healthy walk into Newton's open spaces this winter but be sure you use Yaktrax or stabilicers if conditions get too icy.

If you want to direct your walks to some of the boreal birds, there will be timely information on the American Birding Association's MassBird website.(birding.aba.org/maillist/MASS).



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