## Gleanings from the Northumberland Bird Database

## 'THREE-TOED' WOODPECKERS

By Clive E. Goodwin

Most woodpeckers have four toes – two pointing forward and two back – but the two species that live in the coniferous forests of the north have only a single hind-toe, and hence, three-toed woodpeckers. The larger of the two, the Black-backed Woodpecker, also has the more southerly range, and has nested occasionally in suitable habitat in the south. Birds have summered at Presqu'ile, and a bird was located in the County during the Atlas fieldwork in 2005. The American Three-toed Woodpecker, on the other hand, with ladder-like black and white back striping, is largely confined to Northern Ontario in the breeding season.

If you think 'three-toed woodpecker' is rather a mouthful, the thought apparently also occurred to the bird-naming authorities [the American Ornithologists' Union] over the years, but without much in the way of a solution. These two species have been subject to a positive orgy of name changes. My first Peterson field guide, in 1949, referred to Arctic Three-toed Woodpecker and American Three-toed Woodpecker respectively. But by 1951 Snyder's *Ontario Birds* had replaced American Three-toed Woodpecker with Common Three-toed Woodpecker, and in 1957 the AOU *Check List* then changed the two to Black-backed Three-toed Woodpecker and Northern Three-toed Woodpecker. In 1998 the AOU changed again, introducing Black-backed and Three-toed Woodpecker. But this refreshingly brief nomenclature only lasted until 2003, when ornithologists decided our three-toed was a different species from its look-alike in Europe, so we now have American Three-toed Woodpecker again. It's all enough to give the birds an identity crisis - if they could read.

Why only three toes? The Black-backeds in particular feed on the grubs of long-horned beetles, which tunnel down into the sapwood of fire-killed trees. The woodpecker has several adaptations to enable it to bore into this tough wood. One is the ability to deliver a very hard blow with its bill, and while doing this the bird's toes are spread and the heel raised, with the heel and lower leg rolling back onto the trunk as the stroke is completed. The theory is that a fourth toe would interfere with this action.

Whatever their names, these two are distinctly different from the rest of our woodpeckers, both in their plumage and behaviour. They appear to be thinly distributed across the coniferous forest belt, with the Three-toeds favouring spruce bogs and the Black-backeds drier habitats, and particularly burns. Indeed, the Black-backed could be considered a burn specialist, capable of responding rapidly to the new food sources burns present, with dramatic increases in numbers. Some idea of the sheer size of the influxes that can be involved is offered by the count of 161 birds in burnt forest along 21 km. of highway north of Thunder Bay in January 1999. This is many more Black-backeds than most birders can hope to see in a lifetime!

The down-side to this is that if there are no burns there's nowhere for all these birds to feed, so fire suppression and salvage logging have likely combined to depress the species' numbers. In pre-settlement times regular forest fires must have been a major element in the ecology of the north.

Our main interest in the two comes from those times when they move south. These irruptions are usually in the late fall and winter, with birds sometimes remaining into spring, and indeed occasionally over the following summer. They are driven, one assumes, by shortages of food and suitable habitat, and although the Black-backeds typically predominate in these movements, Three-toeds often appear as well. Clearly this species will also respond to localized food concentrations, even if it is not as fire-dependent as the Black-backed, and it too will irrupt if conditions warrant.

Southern Ontario records show small winter movements of Black-backeds in most years from the 1950's on, with the occasional Three-toed. Our own first Black-backed record was in 1953. The first big invasion was in 1956-7, at a time the Dutch elm disease was at its peak. A study by Dave West and Murray Speirs found a total of 28 Three-toeds and 114 Black-backeds reported in the Province that winter. Northumberland recorded 3 and 11 birds respectively [interestingly about 10% of the Provincial total], and we had one of our five summer records in 1956. Numbers then continued relatively high each winter until 1966. By then the elm disease would probably have been tapering off.

Since then one or two Black-backed Woodpeckers have continued to appear here in most winters, but only 1974-5 and 1992-3 have yielded larger numbers – 3 Black-backeds and a single Three-toed in both years, and since 2000 there have been no winter records of either species. Until this winter: the past fall and early winter saw a movement of both species into southern Ontario, and we had several reports from Presqu'ile. At the time of writing probably at least 2 Three-toeds [the first since 1993] and one Black-backed were involved, but there's still time for more, and if past years are any guide, we can expect more.

But they're not easy birds to find. They've variously been described as enigmatic, elusive, and ghost-like. Ironically they're often quite tame, but they're so unobtrusive that you can completely overlook them. On the breeding grounds they're noisier, but in winter they call infrequently if at all, and often the only clue to their presence is a persistent soft tapping. They will spend an hour or more quietly working over a tree trunk, steadily scaling off the bark and periodically drilling small holes to reach beetle larvae below the bark. The resulting tree often has a very distinctive appearance, with the entire trunk stripped to expose the reddish underbark, pitted with small holes.

It seems likely that much of the foraging by both species in their incursions into the south is on bark and engraver beetles. These insects live just under the bark, which lends itself to the scaling technique described above. These are not the only species to scale a tree in this manner – Hairy Woodpeckers will sometimes do so – but it's worth keeping an eye on trees showing signs of recent scaling. Who knows, you might find a three-toed woodpecker!