## Blue duck in the Wairoa and Lee Rivers

In November 2005, Dave Barker was contracted to search for blue duck in these rivers. His report is as follows:

Blue Duck Survey Wairoa & Lee Rivers, Richmond Range, Nelson District

## Topo Map 260-N28, Golden Downs

On Tuesday 1st and Wednesday 2nd November 2005 I surveyed the left branch of the Wairoa River for blue duck. I was accompanied by Gus, a trained, rare bird locator dog. We began at the road end grid ref 187643 and walked in to the mid Wairoa Hut. We travelled in the riverbed unless we had to use the track because of impassable gorging. From mid Wairoa Hut we surveyed upstream to a major fork in the river at grid ref 198583.

As well as using the dog to indicate any blue duck that may have been hidden within the riverbed, a careful search for footprints and duck shit was undertaken, especially around confluences of the Wairoa and tributaries.

No blue duck or sign of blue duck was found. This did not surprise me as the river isn't of any size that would offer blue duck substantial protection from attention by stoats.

On Thursday 3<sup>rd</sup> November we surveyed a section of the Lee River beginning at grid ref 233713 upstream to grid ref 237693 where the river became gorged and impassable. Waterfall Creek, a tributary on the true right was surveyed up to the waterfall at grid ref 244705 (approx). No blue duck or sign of blue duck was found. Waterfall Creek is very narrow with a small flow and is modified by pine plantations in the lower reach. The small size of Waterfall Creek, would not offer any secure habitat for blue duck when considering the threat of stoats. The Lee River itself looked more promising in the lower reach than the left branch of the Wairoa but the feeling on all of the survey was that both catchments would have seen substantial stoat numbers and the size of the rivers offer no long term secure habitat for blue duck, It felt like apart from the occasional lone bird that the catchments were no longer inhabited by blue duck.

The only trout seen were in the Lee River. The pine forests and scrub in the Lee support many feral goats. This should be mentioned to DOC.

Dave Barker December 2005

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The findings presented in this report should be considered in the light of what we know about blue duck in the Richmond Range over recent times. Twenty years ago blue duck were regularly encountered in all of the major catchments – Pelorus, Wakamarina, Timms, Goulter, Motueka and Wairoa as well as minor catchments such as the Brook, Maitai, Lee and Roding. Whether they bred in all these catchments is not known. Over this period sightings have become less widespread and less frequent. These observations are consistent with what is known of trends elsewhere in the country – breeding productivity is low because of egg predation and while adults may live to an old age, females are often killed on the nest.

During the last 20 years blue duck were occasionally recorded from the Lee and Wairoa, sometimes well downstream of the bush boundary (Hay & Young 2005). These were usually single birds and I am unaware of any breeding records.

Dam construction and loss of river habitat could only have an adverse effect on this relict population of blue duck in the Richmond Range. However the significance of this would be small given the continued decline of the population through predation. A predator control operation would not make these rivers safer for dispersing birds but would be beneficial if a pair chose to breed.

The expense of establishing and maintaining a predator control operation of sufficient size to benefit blue duck at this location could probably only be justified if it was supplemented by the introduction of captively raised young birds. Mitigation of this nature would be more effective if directed at supplementing blue duck conservation work currently undertaken elsewhere.

The Department of Conservation is focusing its work on eight sites throughout the country, each of which will be managed to support at least 50 pair of blue duck. The Wangapeka/Fyfe catchments is one of these sites and, although resources are only available to manage a small part at present, this work has seen numbers in the lower Wangapeka rise from three to almost thirty in less than four years.

The Wangapeka/Fyfe operation now has the infrastructure to ensure that any additional resources can immediately be used to extend the area of protected habitat and the size of this population.

Peter Gaze 6 June 2006

## Reference;

Hay & Young, 2005. Review of Biological Data relating to the Waimea River Catchment. Cawthron Report 996.

## Attached:

Topo map 260 N 28, section showing Wairoa and Lee survey coverage.