

“moist in winter and parched in summer” habitat description from the Atlas of the British and Irish Flora.

### How did it get to The Noises?

It may have survived in Auckland since those two early records, although I find it unlikely because the region and its islands (including The Noises) have been well botanised for native and naturalised species for well over a century. Perhaps the black-backed gulls carried it to the island for nesting material? Their extensive nesting sites on Rangitoto Island some 17 km away deserve a closer inspection. Another possibility is that it came off someone’s boot. The site is on the route from the northern boat landing rocks up to a small hut used on the island by scientists since 1977-78 (Cameron 1998). Perhaps one of the visiting scientists came directly from

southern New Zealand with a bird’s-foot clover seed stuck in his/her boot?

This article is to record that this rather cryptic bird’s-foot clover is present in Auckland, and it would be good to keep an eye out for it.

### Acknowledgements

I thank Rod, Sue and Zoe Neureuter, owners of The Noises Islands, for assisting and encouraging the plant survey; Sue Neureuter for joining me during the Motuhoropapa visit; staff of CHR, MPN, NZFRI, WELT herbaria for their records of bird’s-foot clover; Elizabeth Miller for two literature records; Don McFarlane of the Auckland Zoo for fitting me into the Zoo’s trip to The Noises; Department of Conservation for transport to the island; and Joshua Salter for producing Fig. 2.

### References

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## Waipu Beach “red tide” seaweed wash-up, January 2016

Mike Wilcox

There was a spectacular washup of seaweed at Waipu Beach, Northland, in early January 2016 (Fig. 1). This was reported on the TV3 News, and also in the NZ Herald. Summer washups of red algae at Waipu Beach and Langs Beach seem to be a regular event, and have been reported in local newsletters and newspapers (Whangarei Boys High School News 15 Apr 2014; Bream Bay News 28 Feb 2013, 3 Dec 2015, 14 Jan 2016; The Northern Advocate 11 Jan 2016).



**Fig. 1.** Waipu Beach “red tide”, 15 Jan 2016. Photo: Andre LaBonte.

I contacted Andre LaBonte of LaBonte Coastal Consultants, Waipu, asking for specimens to be sent to the Auckland Museum, to find out what species were present in this latest washup. Samples were received, and analysis completed on 14 January 2016.

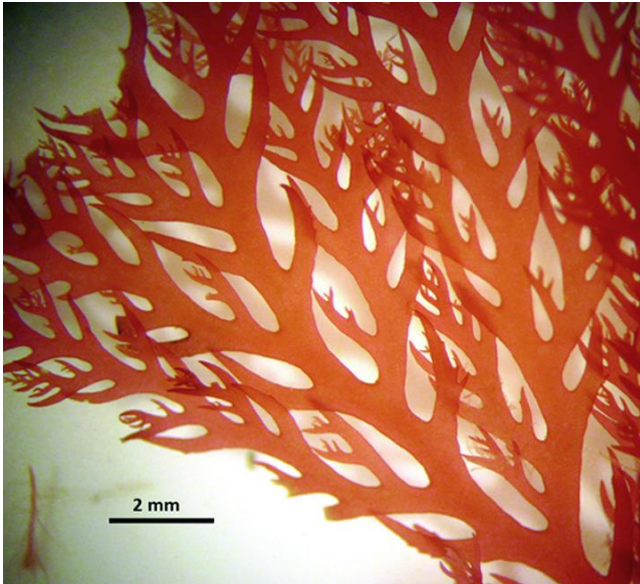
The species identified in the samples were all red algae, as follows:

*Plocamium angustum*, making up about 60% of the volume bulk of the samples. Fresh whole plants. Bright red. AK 360003 (Fig. 2).

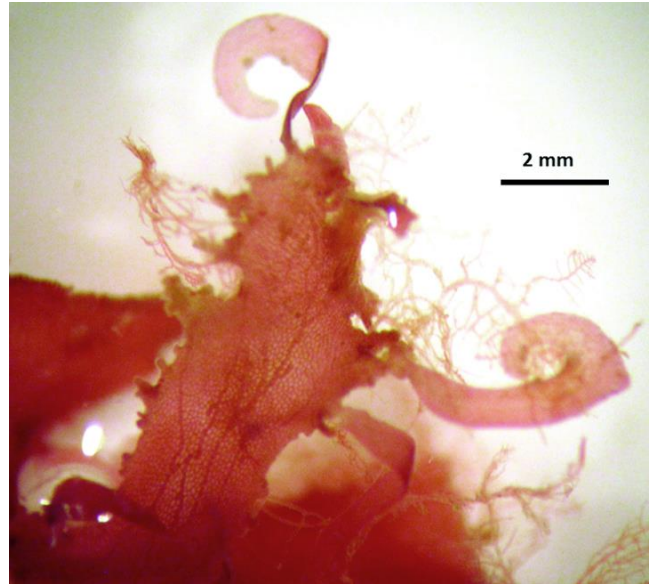
*Acrosorium ciliolatum*, making up about 35% of the volume bulk of the samples. Fresh whole plants. Reddish brown. AK 360001 (Fig. 3).

*Spyridia filamentosa*, mainly as small fragments. Pinkish. AK 360004 (Fig. 4).

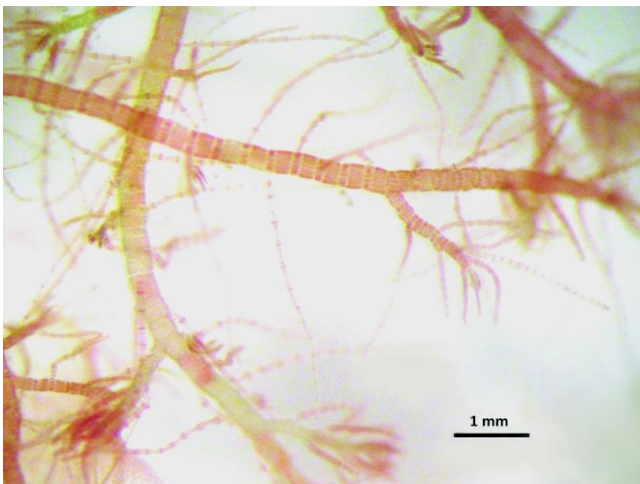
*Amalthea freemaniae* (formerly *Halymenia latifolia*), large soft, fragile greenish-coloured blades, entangled with the other algae. AK 360005.



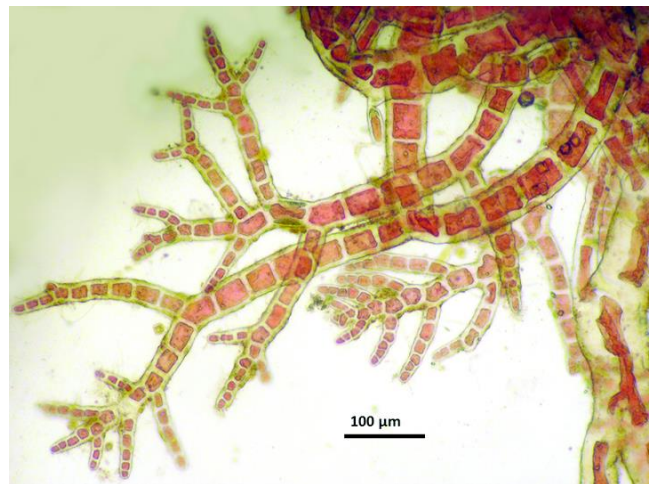
**Fig. 2.** *Plocamium angustum*, Waipu Beach algae, 11 Jan 2016, AK 360003.



**Fig. 3.** *Acrosorium ciliolatum*, Waipu Beach algae, 11 Jan 2016, AK 360001. Note characteristic hooks and visible veins. The fine, pink alga with it is *Spyridia filamentosa*.



**Fig. 4.** *Spyridia filamentosa*, Waipu Beach algae, 11 Jan 2016, AK 360004.



**Fig. 5.** *Callithamnion* sp., Waipu Beach algae, 11 Jan 2016, AK 360000.

*Callithamnion* sp., an unidentified branched, uniseriate, small, filamentous red alga entangled with the other algae. AK 360000 (Fig.5).

There were also a few fragments of some other algae.

Specimens have been lodged in the herbarium of the Auckland Museum (AK numbers as above).

I have encountered the assemblage of *Plocamium* – *Acrosorium* – *Spyridia* in beach washups in other places (e.g. Manukau Harbour, Cheltenham Beach,

Tapapakanga Regional Park), but not in the huge volumes experienced at Waipu. Judging by the freshness of the *Plocamium* and *Acrosorium* in particular, the source of the material is likely to be fairly nearby in Bream Bay or the Whangarei Harbour entrance, from subtidal channels and shell or cobble beds.

*Spyridia filamentosa* has been the main culprit in other large washups of red algae on Waiheke Island (Pie Melon Bay), and on the Coromandel Peninsula (Whangapoua Beach) as reported by Nelson et al. (2015).

#### Reference

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