11. ENVIRONMENTAL ANALYSIS

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11.1 The macroplant

A total of 7,209 charred macroplant remains were recovered from 132 deposits dated from the Neolithic, Iron Age, Late Iron Age, and medieval periods. The assemblage was composed of 6,770 cereal remains, three flax seeds (*Linum usitatissimum* L), 152 hazelnut shell fragments (*Corylus avellana* L), 11 fragments of heather (*Calluna vulgaris* L), two buds, and 271 weeds. The cereal was formed of 6,484 caryopses, one spikelet, 270 floret bases, two glumes, three straw fragments, and ten culm nodes. The cereal species were wild oat (*Avena strigosa* L), oat (*Avena* sp), six-row hulled barley (*Hordeum vulgare* L), two-row hulled barley (*Hordeum distichon* L), naked barley (*Hordeum var Nudum* L), barley (*Hordeum* sp), bread/club wheat (*Triticum aestivum/compactum* L), emmer (*Triticum dicoccum* L), and wheat (*Triticum* sp). The assemblage was concentrated within Structure C, Structure H, Pit Group 2, pit [037], and pit [28001] dated to the Iron Age, Late Iron Age, and medieval periods. Preservation of the macroplants ranged from poor to good with most described as adequate.

11.1.1 Crops

Cereal remains were recovered from the Iron Age, Late Iron Age, and medieval deposits. There was no surviving evidence of crop exploitation during the earlier Neolithic and Bronze Age phases of occupation. Given the small size of the cereal assemblage it was not possible to identify any changes in crop exploitation over the period of occupation. The most information that could be drawn from this assemblage was that six-row hulled barley and oats were among the more favoured cereal crops cultivated with two-row hulled barley, naked barley, bread/club wheat, and emmer having a much more minor role or representing weeds of the main crops.

Both barley and oats were economically important species throughout the occupation of this settlement and this was probably because these two species are more suited to the climate and growing conditions of the prehistoric and medieval landscape in Grantown-on-Spey. Similar results demonstrating the importance of these two crops have previously been reported at Kintore, Aberdeenshire (Holden 2002), Bertha Park, Perth (Robertson 2020), and NHS Highland Elective Care Centre, Inverness (Robertson 2022), as well as medieval sites including Perth High Street (Fraser & Smith 2011).

11.1.2 Nuts

A total of 152 hazelnuts were scattered among 38 contexts associated with the structures, pit groups, and isolated features dated to the Middle Iron Age, Late Iron Age, and early medieval periods. Interestingly, none were found in the Mesolithic or Neolithic features where they might typically be considered more common. There was no evidence of selective or deliberate disposal. Instead, the hazelnut fragments accumulated from discarded food debris and there was no evidence of largescale food processing, storage, or roasting of large caches of nuts within the surviving assemblage during any stage of occupation (Bishop 2019). What is obvious is that hazelnuts were routinely available in the landscape surrounding the settlement where they were collected as an additional food source with the shell perhaps recycled as a fuel kindling material.

11.2 The charcoal

The charcoal assemblage derived from both fuel debris and from structural elements. There was no evidence to suggest any wooden artefacts were present within any of the deposits. The species are all native and would have grown in the surrounding landscape. Alder, birch, and willow are found in damp habitats, while apple/pear/hawthorn/rowan, hazel, ash, and cherry grow in hedgerows, scrub, or more open woods. Pine prefers more acidic landscapes, whereas oak is adaptable to a variety of growing conditions (Linford 2009; Stace 2010; Martynoga 2012). The species that were consistently favoured throughout the occupation of the settlement were alder, birch, hazel, and pine suggesting these species grew locally and were consistently available. The lack of apple/pear/hawthorn/rowan, ash, cherry, and willow charcoal suggests that these trees had a more marginal role and may have been more difficult to access, or that they were only available seasonally.

11.3 Conclusion

The macroplant and charcoal assemblages from Craggan, Grantown-on-Spey are composed of a mix of domestic food and fuel refuse intermixed with some structural elements. Accurately identifying changes in agricultural practices, diet, wood exploitation, and economic status was difficult given that some of the features provided multiple dates. The information that could be drawn from the two assemblages was that cereal crops, in particular six-row hulled barley and oats, were of importance alongside hazelnuts and that a range of woodland species were consistently available in the surrounding landscape. The ecofacts demonstrate that both the prehistoric and medieval communities had access to a range of plant resources which were used for food, domestic fuel, and building materials.