

## **Guidance notes on High winds**

Tree failure is more likely with increasing wind strength. There are many factors that affect how trees respond to wind loading that include tree species, the tree's structural and physiological condition, ground conditions, tree exposure, wind direction, and time of year. To reduce the risk of harm activities can be limited with increasing wind strength. The following are guidelines to help decision making and can be adapted for particular site conditions.

### **Wind strength as measure on the Beaufort scale** (see appendix i)

**Force 6:** Activities under trees stopped, but pedestrian access permitted for unavoidable travel.

**Force 9:** All walking under trees stopped.

The met office issues forecasts that can be used to plan alternative activities on high wind days. There are local met office weather stations that can be used as a source of measurement of wind strength in the area.

### **Implementation:**

This guide should be used to help make decisions on site. No county wide instruction will be given during extreme weather. If verbal instruction and direct supervision are not appropriate to stop activity or movement under trees during high winds then reasonable measures should be taken. These could include physical barriers (for example barrier tape attached to trees / posts etc) and signs that are firmly fixed. Any signage that is put up has to be securely fastened as these warning signs could themselves become a hazard if blown about with the wind. Consideration can be given to fixing signs on the downwind side of paths etc to lessen the danger should signs become loose.

**Appendix i: Beaufort scale with description.**

Beaufort Force		Description	Specification on land		
			Knots	Km/h	mph
0	Calm	Smoke rises vertically	Less than 1	Less than 1	Less than 1
1	Very Light	Direction of wind shown by smoke drift but not by wind vanes	1 - 3	1 - 5	1 - 3
2	Light breeze	Wind felt on face, leaves rustle, ordinary wind vane moved by wind	4 - 6	6 - 11	4 - 7
3	Gentle breeze	Leaves and small twigs in constant motion, wind extends white flag	7 - 10	12 - 19	8 - 12
4	Moderate breeze	Wind raises dust and loose paper, small branches move	11 - 16	20 - 29	13 - 18
5	Fresh breeze	Small trees in leaf start to sway, crested wavelets on inland waters	17 - 21	30 - 39	19 - 24
6	Strong breeze	Large branches in motion, whistling in telegraph wires, umbrellas used with difficulty	22 - 27	40 - 50	25 - 31
7	Near gale	Whole trees in motion, inconvenient to walk against wind	28 - 33	51 - 61	32 - 38
8	Gale	Twigs break from trees, difficult to walk	34 - 40	62 - 74	39 - 46
9	Strong gale	Slight structural damage occurs, chimney pots and slates removed, branches break from trees	41 - 47	75 - 87	47 - 54
10	Storm	Trees uprooted, considerable structural damage occurs	48 - 55	88 - 101	55 - 63
11	Violent storm	Widespread damage	56 - 63	102 - 117	64 - 73
12	Hurricane	Widespread damage	>64	>119	>74