

PHOTOGRAPHS

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Photograph 1: Plot 1 (EP2) Downfall Creek. The forest at this site is Complex Notophyll Vine Forest with emergent *Agathis robusta* (Kauri Pine). Bob Hewett (*left*) and Matt Bradford consider the abundance of small stems on this site. (Photograph courtesy of Andrew Graham.)

Photograph 2: Plot 1 (EP2) Downfall Creek. The canopy of the plot ranges between 15 and 18 m in height and is somewhat lower than nearby examples of the same forest type. (Photograph courtesy of Andrew Graham.)

Photograph 3: Plot 1 (EP2) Downfall Creek. On the plot there are examples of basal branching, often indicative of past disturbance. In 2000, recognition of this feature led the plot review team to further research the history of the site. (Photograph courtesy of Andrew Graham.)

Photograph 4: Plot 2 (EP3) Mount Haig. Tree E 23 is a 21 metre high Mountain Kauri (*Agathis atropurpurea*), a characteristic species in Simple Microphyll Vine-Fern Forest. (Photograph courtesy of Andrew Graham.)

Photograph 5: Plot 2 (EP3) Mount Haig. A general view across the western section plot that is not affected by the ancient landslide. (Photograph courtesy of Andrew Graham.)

Photograph 6: Plot 3 (EP4) Little Pine Creek. This dense understorey with fan palms (*Licuala ramsayi*) is characteristic of Mesophyll Vine Forest that has been intermittently disturbed by cyclones. (Photograph courtesy of Andrew Ford.)

Photograph 7: Plot 3 (EP4) Little Pine Creek. Bob Hewett is collecting root biomass and relict soil charcoal samples under a Hope's Cycad or Zamia Palm (*Lepidozamia hopei*). (Photograph courtesy of Andrew Graham.)

Photograph 8: Plot 4 (EP9) Robson Logging Area. In this Simple Notophyll Vine Forest, tree C 20 is a Silver Ash (*Flindersia bourjotiana*) on the upper slope landform element of the plot. (Photograph courtesy of Andrew Ford.)

Photograph 9: Plot 5 (EP18) Mount Lewis. A view of some mid- and larger sized stems in the Simple Microphyll Vine-Fern Forest on the Mount Lewis plot. (Photograph courtesy of Andrew Graham.)

Photograph 10: Plot 5 (EP18) Mount Lewis. The enduring remains of a number of old fallen trees were noted along the western side of the plot at the time of plot establishment. (Photograph courtesy of Andrew Graham.)

Photograph 11: Plot 5 (EP18) Mount Lewis. A seedling of Mount Spurgeon Pine (*Prumnopitys ladei*) in the understorey of the plot. This is one of two charismatic tree species on the plot with very limited distributions in the region. (Photograph courtesy of Andrew Graham.)

Photograph 12: Plot 6 (EP19) Garrawalt. Moderate and large sized tree stems of the Simple Notophyll Vine Forest in the northwestern subplot (M) that has remained free of dieback caused by *Phytophthora cinnamomi* despite a positive record of the *P. cinnamomi* organism from the subplot in 1976. (Photograph courtesy of Andrew Ford.)

Photograph 13: Plot 6 (EP19) Garrawalt. This vigorous regeneration of small stems in the northeastern subplot (P) followed extensive earlier vegetation dieback caused by *Phytophthora cinnamomi*. Positive records of *P. cinnamomi* and *P. heveae* were made from this subplot in 1976. (Photograph courtesy of Dan Metcalfe.)

Photograph 14: Plot 7 (EP29) Mount Fisher. On this exposed high altitude plot, stem suckers and low branching or multi-stem form trees are common. These stems of *Cryptocarya leucophylla* are typical of the phenomenon. (Photograph courtesy of Andrew Graham.)

Photograph 15: Plot 9 (EP31) Woopen Creek. This floristic variant of Complex Mesophyll Vine Forest was disturbed by Cyclone Winifred in 1986. The locally restricted endemic species, Barong Quassia (*Quassia* sp. Barong B. Gray 742), is common in the dense understorey (see right-hand side, elongated leaves). (Photograph courtesy of Andrew Ford.)

Photograph 16: Plot 9 (EP31) Woopen Creek. In 1976, trees of Johnstone River Hardwood (*Backhousia bancroftii*) made up one third of the measured stems and constituted two-thirds of the basal area on the plot. This tree has characteristic star buttresses and patterned coarse flaky bark. (Photograph courtesy of Andrew Ford.)

Photograph 17: Plot 10 (EP32) Mcllwraith Range. In this hybrid forest type (Mesophyll Vine Forest fan palm variant / Simple Notophyll Vine Forest) the most common tall tree is Golden Penda (*Xanthostemon chrysanthus*). (Photograph courtesy of Matt Bradford.)

Photograph 18: Plot 10 (EP32) Mcllwraith Range. The understorey of the plot is moderately dense with saplings, vines, pandans (*Pandanus gemmifer*) and fan palms (*Licuala ramsayi*) the common components. (Photograph courtesy of Matt Bradford.)

Photograph 19: Plot 10 (EP32) Mcllwraith Range. Repainting the tree marking on the plot. The measurement position ring being painted by Trevor Parker (foreground) is located higher on the stem than usual because of a stem deformity. (Photograph courtesy of Matt Bradford.)

Photograph 20: Plot 11 (EP33) Curtain Fig. Vine and shrub species make up about one quarter of the plant species recorded from the plot in this Complex Notophyll Vine Forest. The tallest trees on the plot range from 32 to 43 m in height. (Photograph courtesy of Matt Bradford.)

Photograph 21: Plot 12 (EP34) Russell River. This forest is a well-developed example of Complex Mesophyll Vine Forest. The abundance of hemi-epiphytes on tree trunks is a characteristic of this forest type but can make precise measurement of stem diameters difficult. (Photograph courtesy of Andrew Graham.)

Photograph 22: Plot 12 (EP34) Russell River. On stem G20, a Red Tulip Oak (*Argyrodendron peralutum*), the painted measurement position is located just above the buttresses. Many bracket fungi are clearly evident on the middle buttress and subsequently the tree was recorded as 'dead' in 2002. (Photograph courtesy of Andrew Graham.)

Photograph 23: Plot 12 (EP34) Russell River. Stem I 15 is another example of the Red Tulip Oak (*Argyrodendron peralutum*). Above the buttresses, the relatively slender stem (0.36 metre dbh) reaches to 34 metres. (Photograph courtesy of Andrew Graham.)

Photograph 24: Plot 13 (EP35) Whyanbeel. This site is a typical example of regularly disturbed Mesophyll Vine Forest. Because of the repeated cyclonic disturbances, there is an abundance of small stems across much of the plot. (Photograph courtesy of Andrew Graham.)

Photograph 25: Plot 13 (EP35) Whyanbeel. Severe tropical Cyclone Rona (12 February 1999) was responsible for the toppling of this Wattle (*Acacia celsa*). Numerous canopy gaps were formed on the plot at this time. (Photograph courtesy of Andrew Graham.)

Photograph 26: Plot 13 (EP35) Whyanbeel. In the high intensity light below a canopy gap caused by the 1999 cyclone, a Wattle seedling (*Acacia celsa*) has germinated from the soil seed bank and successfully established in the groundstorey. (Photograph courtesy of Andrew Graham.)

Photograph 27: Plot 14 (EP37) Eungella. In this example of a feather palm variant of Complex Notophyll Vine Forest, the tallest trees ranged from 32 to 42 metres high at plot establishment. This Mackay Tulip Oak (*Argyrodendron actinophyllum* ssp. *diversiflorum*) has a 0.69 metre dbh and is 32 m high. (Photograph courtesy of Andrew Ford.)

Photograph 28: Plot 14 (EP37) Eungella. Andrew Ford examines and records species and stem damage adjacent to a canopy gap resulting from a recent treefall on the plot. (Photograph courtesy of Dan Metcalfe.)

Photograph 29: Plot 14 (EP37) Eungella. The Piccabeen Palm (*Archontophoenix cunninghamiana*) is abundant and dominates the midstorey over much of the plot. (Photograph courtesy of Andrew Ford.)

Photograph 30: Plot 14 (EP37) Eungella. This plot is located on the margin of the escarpment and receives a relatively high orographic rainfall. Dan Metcalfe and Matt Bradford contemplate a day of wet fieldwork as further moisture is intercepted directly from the clouds rolling across the site. (Photograph courtesy of Andrew Ford.)

Photograph 31: Plot 15 (EP38) The Crater. The soil at this plot is enriched with pyroclastic basaltic fragments and supports Complex Notophyll Vine Forest. Tree K 10, a Northern Brush Mararie (*Geissois biagiana*) is 35 metres in height and 1.34 metres in diameter. (Photograph courtesy of Andrew Graham.)

Photograph 32: Plot 15 (EP38) The Crater. The lower slope section of the plot is located on a valley infill of friable, dark grey sandy loam about five metres deep. (Photograph courtesy of Andrew Ford.)

Photograph 33: Plot 15 (EP38) The Crater. Bob Hewett uses a ladder to measure the tree diameter at a stem measurement position above the high buttresses. (Photograph courtesy of Andrew Graham.)

Photograph 34: Plot 17 (EP41) Oliver Creek. This forest, a floristic variant of Complex Mesophyll Vine Forest, is located on a gently sloping, poorly sorted fan deposit on the footslopes of Mount Hemmant. Weathered metamorphic gravel and cobbles cover most of the surface of the plot. (Photograph courtesy of Andrew Graham.)

Photograph 35: Plot 17 (EP41) Oliver Creek. During heavy rainfall, gully-head erosion in the ephemeral creek actively reworks the upper sections of the alluvial fan and the creek overflows its channel, depositing new debris and shifting previous deposits. Tree O 18 is a Daintree Penda (*Lindsayomyrtus racemoides*). (Photograph courtesy of Andrew Graham.)

Photograph 36: Plot 17 (EP41) Oliver Creek. The shallow rooting pattern of many rainforest trees make them susceptible to toppling in very strong winds, particularly when soils are saturated. This treefall occurred during Cyclone Rona in 1992. (Photograph courtesy of Andrew Graham.)

Photograph 37: Plot 17 (EP41) Oliver Creek. This small canopy gap was formed on the plot during Cyclone Rona. Such periodic disturbances, at varying scales of intensity and extent, are characteristic of the coastal rainforests. (Photograph courtesy of Andrew Graham.)

Photograph 38: Plot 17 (EP41) Oliver Creek. The Daintree Penda (*Lindsayomyrtus racemoides*) is the most common tree on the on the plot. In 2000, a dense carpet of well-established *L. racemoides* seedlings extended across much of the plot except for those areas disturbed by the creek and its overflow. (Photograph courtesy of Andrew Graham.)

Photograph 39: Plot 17 (EP41) Oliver Creek. In the lowland forests of the Daintree area, the tree *Ryparosa javanica* is conspicuous because it bears flowers and fruits both on the trunk and in the canopy. (Photograph courtesy of Andrew Graham.)

Photograph 40: Plot 18 (EP42) Iron Range. This typical Semi-Deciduous Mesophyll Vine Forest occurs on a riverine plain. The centre of the plot is located on a scroll (an alluvial sedimentary rise) and has a dense understorey of seedlings and shrubs. (Photograph courtesy of Matt Bradford.)

Photograph 41: Plot 18 (EP42) Iron Range. Along the eastern, northern and western plot margins, the bed of the seasonal overflow channel is almost devoid of small tree and understorey growth. (Photograph courtesy of Matt Bradford.)

Photograph 42: Plot 18 (EP42) Iron Range. This actively eroding section of gully with exposed tree roots is relatively close to the river in the northern section of the plot. (Photograph courtesy of Matt Bradford.)

Photograph 43: Plot 18 (EP42) Iron Range. Adam McKeown (on the ladder) is encouraged by Trevor Parker in a demanding measurement of tree B 18, a Leichhardt Pine (*Nauclea orientalis*). (Photograph courtesy of Matt Bradford.)

Photograph 44: Plot 18 (EP42) Iron Range. *Tetrameles nudiflora* is a pan-tropical tree and this individual (stem D 14) is 32 metres high with a dbh of 0.95 metre above its characteristic buttresses. An abundance of such large stems appears to be a feature of the forest type. (Photograph courtesy of Matt Bradford.)

Photograph 45: Plot 18 (EP42) Iron Range. The bank of the Claudie River is eroding adjacent to subplot M. In 1979 high river levels caused erosion of the stream bank and tree falls on the plot. This erosion has continued with the riverbank cutting back 25 metres by 1998. (Photograph courtesy of Matt Bradford.)

Photograph 46: Plot 19 (EP43) Mount Baldy. This Simple Microphyll Vine-Fern Forest plot is centered on the midslope of a major spur and extends from the upper slope down to the lowerslope landform elements. The tallest trees have high, broad crowns that structurally dominate the uppermost canopy. (Photograph courtesy of Andrew Ford.)

Photograph 47: Plot 20 (EP44) Fantail Logging Area. In this ridge top section of the plot in Simple Notophyll Vine Forest, Jana Kaeppler looks up an outstanding specimen of White Eungella Satinash (*Syzygium wesa*). This tree has a dbh of 1.01 metres and is 39 metres high. (Photograph courtesy of Andrew Ford.)

Photograph 48: Plot 20 (EP44) Fantail Logging Area. A view of the midslope section of the plot. The maximum basal area recorded from this plot ($59.4 \text{ m}^2 \text{ ha}^{-1}$) is typical of well-developed forests on wet, upland to highland sites. (Photograph courtesy of Andrew Ford.)