

# Appraising Stand Suitability for Transformation

To be used in conjunction with FCIN40  
([www.forestry.gov.uk/publications](http://www.forestry.gov.uk/publications))

Forestry Commission Information Note 40 (FCIN40) *Transforming Even-aged Conifer Stands to Continuous Cover Management* explains how to assess a stand for suitability for transformation to continuous cover management. This field sheet has been designed to help forest managers record the assessments required and to guide them through the process. To use the field sheet follow these steps:

1. Record the **basic stand details** in Table 1 below.
2. Use your knowledge of the site and tools such as ForestGALES (for wind risk assessment) and ESC (Ecological Site Classification) to produce a **preliminary site ranking** of good, moderate or low potential for transformation using Tables 2, 3 and 4 on page 2.
3. Based on a **detailed stand appraisal** test the preliminary site ranking and consider if it needs to be adjusted. A checklist of features is provided to help judge the likelihood of success of transformation in Table 5 on page 3.
4. Record your **final site ranking** of good, moderate or low suitability for transformation at the bottom of Table 5.

**It is essential that this field sheet is used with reference to FCIN40.** To help with this, the paragraphs in FCIN40 relevant to each stage are shown using numbers in brackets, e.g. [17]. -

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**Table 1** Basic stand details -

<b>Coupe reference</b>		<b>Predominant soil type</b>	
<b>Tree species</b>		<b>P year (and age)</b>	( )
<b>Stand basal area</b>	m <sup>2</sup> ha <sup>-1</sup>	<b>Thinning history</b>	

# FCIN40 Field Sheet – Suitability for Transformation -

## Site appraisal & preliminary site ranking [5-15]

Assess wind risk using Table 2a or 2b depending on the age of the stand, and place a tick against the appropriate score. Do the same for soil fertility (which determines potential vegetation competition) and tree species suitability in Table 3. Add the three scores for wind risk (Table 2a or 2b), soil nutrient regime (Table 3) and species suitability (Table 3) to find the preliminary site ranking in Table 4.

**Table 2a** Wind risk in younger stands, 20-40 years old [7-11]

Assessment of wind risk ForestGALES evaluation [9,11]	Score	✓
Wind risk status 6 reached at >80 years	1	
Wind risk status 6 reached at 40-80 years	2	
Wind risk status 6 reached at <40 years	3	

**Table 2b** Wind risk in older stands, over 40 years old [7-11] -

Assessment of wind risk Qualitative evaluation [10-11]	Score	✓
Well-thinned stand, basal area ≤ yield tables, deep rooting soil (e.g. brown earth, podsol, or weak/intergrade ironpan)	1	
Underthinned stand, basal area > yield tables, deep rooting soil	2	
Stand with history of very little or no thinning and/or shallow rooting soil (e.g. peat, gley)	3	

**Table 3** Soil fertility and species suitability [12-13] -

		Score	✓
Soil Nutrient Regime in ESC [12]	Very poor or poor	1	
	Medium	2	
	Rich or very rich	3	
Species suitability in ESC [13]	Very suitable	1	
	Suitable	2	
	Unsuitable	3	

**Table 4** Preliminary site ranking of potential for transformation [14] -

Wind risk, soil fertility & species suitability scores	Ranking	✓
Combined score of <b>3 or 4</b> , wind risk scored <b>1</b>	<b>Good</b>	
Combined score of <b>5 or 6</b> , wind risk scored <b>1 or 2</b>	<b>Moderate</b>	
Any of the criteria scored <b>3</b>	<b>Low</b>	

# FCIN40 Field Sheet – Suitability for Transformation

## Detailed stand appraisal [16-24]

All stands with potential for transformation to CCF should be inspected in the field, paying particular attention to the features listed in Table 5. Use your assessment of these features to adjust the preliminary site ranking and decide on the likelihood of success with transformation. **The most suitable sites will be those with little or no browsing, presence of desirable advance regeneration, a favourable stand structure, and ground flora and litter conducive to seed germination and seedling survival. If any of these conditions are not met, you must be clear on the remedial actions required, their feasibility and likely cost.**

**Table 5** Detailed stand appraisal and final site ranking

Statements to consider when walking the stand	Record judgement as ✓ or ✗
Trees are well suited to the site and of good form [17]	
Past thinning has produced trees with well-developed crowns as potential seed bearers [17]	
There is no evidence of recent windblow to suggest that stability may be at risk [17]	
Stems are of good quality, with little damage or risk of timber degrade [17]	
You are confident of obtaining natural regeneration of the desired species [17]	
There is advance regeneration present in the stand [18-20]	
The advance regeneration is of the desired species [19]	
Competitive ground vegetation is not present and unlikely to form when the stand is thinned [21] – if it is difficult to judge how vegetation will develop, look at canopy gaps or similar open areas nearby	
The litter layer is not deep (<5 cm depth) [22]	
Local populations of mammals (deer, hares, rabbits) are under control and will not impact heavily on regeneration [23]	
There is good access for machines, and the site is already racked or racks could be established with no significant problems [24]	
<b>Suitability for transformation (good, moderate, low)</b>	