Short Rotation Coppice and Miscanthus

Landscape, Archaeology and Ecology: Growers Guidance

Why do we need this guidance?
Growing Short Rotation Coppice (SRC) and Miscanthus (Elephant grass) provides real diversification opportunities for landowners to add value and profit as an energy crop, for animal bedding and a wide range of other uses.

This guidance will help to ensure that these opportunities are realised with due respect to the landscape, archaeological and ecological heritage of Dorset. The Dorset landscape is unique and valued by us all. The county has a very large number of environmental designations such as Areas of Outstanding Natural Beauty (AONB) which covers 53% of Dorset, Scheduled Ancient Monuments, Special Areas of Conservation, Sites of Special Scientific Interest and Heritage Coast which are all intended to help protect this unique character.

Well designed Miscanthus and SRC plantations, which will often be willow or poplar, could enhance the landscape and nature conservation value of your land. This guidance is intended to help you find the best location for these crops if you are considering planting and the most appropriate layout for them.

Some general considerations.
These crops can grow on a wide variety of soils but to achieve an economic yield, they need good, well-drained, fertile soils. If you are lucky enough to have these, read on!

The appearance of these crops is different from those more commonly planted.

- SRC for example has some characteristics of woodland in that it grows tall enough (up to 8m) to create a '3 dimensional mass' which may impede views in some locations but could help screen unsightly features in others. When harvested in blocks the rate of change can be very rapid and again impact on views in a landscape.

- SRC can boost the biodiversity of farms by increasing the numbers of birds, insects and wildlife compared to arable or grassland. Growing several plantations in a staggered fashion so that they are harvested on different years will ensure that the maximum number of species will be supported and reduce the risk of displacement of others.

- Miscanthus should have less of an impact as it is likely to be managed as an annual crop and is not dissimilar to maize. It will however exist on the site for at least 15 to 20 years and grow up to 3.5m-4m tall. In terms of biodiversity Miscanthus is similar to wheat and barley but worse than grassland. There could also be knock-on impacts e.g. converting grassland to cropped land may increase soil run-off.

How do I select the most appropriate site?
When deciding where to plant, be aware of the existing appearance and character of the surrounding landscape.

- What will be the visual implications on the wider landscape if tall plants are introduced?

- Can I fit the planting into the existing pattern of trees, hedges, woodland and with the shape of the land?

- Are there any public rights of way that could be affected?

- Who will be able to see the crops? Consider the impact on your neighbours, from roads, public rights of way and any well used local viewpoints.

This fact sheet was produced by the Dorset Energy Group, the body responsible for implementing the Bournemouth, Dorset and Poole Renewable Energy Strategy and Action Plan. The group involves an executive and several working groups with representatives from each of the nine local authorities in Dorset, and a wide range of other stakeholders. For general queries regarding this sheet contact Pete West at Dorset County Council on 01305 228530.

If your local authority has carried out any Landscape Character Assessments of the area these may help clarify that different landscapes have different 'visual capacities' to 'absorb' new planting. Get advice if necessary from their Landscape Architects.

Are there any regulatory issues to consider?
You don't need planning consent to plant these crops. Please check with your local planning authority to see if you require an Environmental Impact Assessment (EIA). See contact information below.

EIA requirements for energy crops are generally less onerous than for other developments and are required for plantings above 5 hectares in all situations and over 2 hectares for plantings within AONB boundaries.

More information

- **Whole Farm Plans:** It is a good idea to build your ideas in to a Whole Farm Plan; get advice from your local Farming and Wildlife Advisory Group: dorset@fwag.org.uk or for more information about the approach follow this link: **www.defra.gov.uk/farm/wholefarm/index.htm**

- **Nature conservation/biodiversity:** Will the proposals have any impact on any species or habitats? Get advice from the local authority or local wildlife trust: **www.dorsetwildlife.co.uk/**

- **SRC in the Landscape:** this link provides some very useful guidance on the considerations to be taken into account when planning SRC so it blends into the landscape. **www.forestry.gov.uk/PDF/fcgn2.pdf/$FILE/fcgn2.pdf**

- **Rivers and wetland:** consult the Environment Agency if the planting will be close to any watercourses or in a flood plain. **www.environment-agency.gov.uk/contactus/default.aspx**

- **Environmental Impact Assessment (EIA)**
  Your proposals for either SRC or Miscanthus planting may be subject to 'The Environmental Impact Assessment (Uncultivated Land and Semi-natural Areas) (England) Regulations 2001'. Please follow this link for further guidance: NB: See Annex E page 31
  www.defra.gov.uk/corporate/regulat/forms/erdp/ecs/ecs-estabgrant-explain.pdf

- **DEFRA Guidance**
  Best Practice Guide for Miscanthus:
  www.defra.gov.uk/erdp/pdfs/ecs/miscanthus-guide.pdf

  Best practice Guide for SRC: **www.defra.gov.uk/erdp/pdfs/schemes/energy/short-rotation-coppice.pdf**
  - NB: this is the 2004 version. There should be an up to date version coming out imminently.

Defra recently produced a map of opportunities and optimum areas for energy crops which show the potential areas for growing the crop and where it is not appropriate or care is needed to make sure there is no environmental impact: **www.defra.gov.uk/farm/crops/industrial/energy/opportunities/index.htm**

- For information regarding Set-aside see Rural Payments Agency website. **www.rpa.gov.uk**

Detailed site layout and design issues

Consider the following to enhance the landscape and biodiversity value of planting:

- Plant the crops as part of a mixed cropping pattern and in place of intensive arable crops in areas of low conservation interest (this is where they'll grow best, anyway).

- Use the crops to link areas of wildlife interest such as woodlands but make sure there is a suitable buffer zone such as headlands between the crop and any such feature.

- Use wide headlands and rides to increase interest- these are also useful for machinery movements.

- Use the crops to help absorb diffuse pollution from adjacent intensively farmed land especially to protect areas of wildlife interest like ponds and watercourses.

- Use rotational harvesting to help minimise change in the landscape.

- Reduce the scale and include open areas towards the edges to enhance visual interest

- Link with features in the landscape like small woods/ coppice

- SRC will require a storage area for the harvested crop, consider the impacts this may have

Services: Will your planting effect any overhead or buried services cables, wires or pipes? Check with your relevant utility operator.

Set-aside: Land may be planted under the Energy Crop Scheme (see below)

The information on this leaflet was correct as of March 2009.

Energy Crops Scheme
The Energy Crops Scheme (ECS) provides establishment grants for the two energy crops, short-rotation coppice and miscanthus, and aid to help SRC growers set up producer groups.

NB:The new ECS is being co-ordinated by Natural England – please find all the new documents at **http://www.naturalengland.org.uk/planning/grants-funding/energy-crops/default.htm**

Dorset County Council
For all enquiries about any renewable energy development and contacts for landscape, ecology, archaeology, rights of way issues contact:

Pete West - Renewable Energy Development Officer:
01305 228530
p.west@dorsetcc.gov.uk

Trusts and Government Agencies

- Dorset Wildlife Trust:
  http://www.dorsetwildlife.co.uk/
- Natural England
  http://www.naturalengland.org.uk/planning/grants-funding/energy-crops/default.htm
- Forestry Commission:
  http://www.forestry.gov.uk/forestry/HCOU-4U4HZM
- Defra
  http://www.defra.gov.uk/erdp/schemes/energy/default.htm
- Game Conservancy Council:
  http://www.gct.org.uk/text03.asp?PageId=311
- Rural Economy and Land use:
  http://www.relu-biomass.org.uk/
- Dorset Agricultural Advisory Service (DAAS) 01305 215167
  daas@kmc.ac.uk

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