

# The Oak Tree Low Carbon Action Plan

**V6 May 2014**

## Reduced fossil fuel use on the farm

We use hand tools where possible & practical, and only small-scale efficient machinery when necessary:

- Cultivation is minimised to reduce fuel use and improve soil quality, subject to the heavy weed burden of this degraded land in transition from intensive industrial agriculture.
- Diesel powered cultivation (per unit area of production) will be reduced with time as the soil quality improves and thanks to the pigs' noses acting as ploughs.
- Irrigation petrol use (per unit area of production) to be reduced as organic matter in the soil retains more water in the soil accessible to plants' roots.

Aim for overall reduction of fossil fuel usage for cultivation and irrigation by 10% by April 2015.

When funds allow we will install renewable energy powered water pumping. Drip irrigation and sustainable growing techniques reduce water usage where possible since their installation in the period since our previous Carbon Charter review.

There are no refrigeration facilities on site; instead we concentrate on selling only the freshest vegetables, spraying with drinking water in summer to remove field heat when necessary. We use an unpowered underground "root cellar" (a discarded freezer with nasty gases safely dealt with) for short term cool storage.

Meat and eggs are transported the minimum distance possible, and (legal) waste human food is used to dramatically reduce reliance on animal feed which is the product of energy intensive industrial agriculture as well as preventing the waste food from being landfilled.

Unheated secondhand polytunnels are used to increase the range of vegetable available through the year with minimal carbon impact. Careful cropping plans, a community "Preserving Group" and the annual spring Wild Food Walk (during the "hungry gap" of April/May when annual vegetables are scarce) encourage farm members to eat with the seasons and make the most of what is available through the seasons.

In June 2014 two beef cattle will be added to the farm livestock for a "mob grazing" programme which has been shown to sequester very significant levels of soil carbon.

## Ecosystem Services

We are developing a permaculture forest garden that will aid water retention, increase soil and tree based carbon sequestration and encourage biodiversity, as well as delivering food, fuel and fibre.

We leave a strip of uncut grass to encourage wildlife and we have undertaken extensive tree planting around the perimeter of the farm as well as in strips across the farm both of which encourage local wildlife.

## **Very local sales**

Deliveries are now restricted to central and Eastern Ipswich, except where we make use of a journey that was going to take place anyway (e.g. CSA member who lives in Felixstowe who already travels to Ipswich every fortnight). The ongoing development of the CSA along with building up our very local customer base will enable us to continue to reduce our delivery fuel use (per unit area cultivated).

The CSA vegetable delivery is a cooperative effort between all members to reduce carbon emissions, so one neighbour collected all boxes at one time for the neighbourhood.

## **Vehicle use related to farm activities**

Grower/managers Eric Nelson & Joanne Mudhar make every effort to reduce car use related to farm activities which are primarily collecting waste food for animals: restricted to local East Ipswich sources.

CSA members are encouraged to use low carbon travel to & from site (fun cycling incentive scheme) plus low carbon distribution networks of vegetables and other shares (eggs and flowers in the same share boxes).

Meat is processed and distributed as close as is legally possible to the members who purchase it: nearest abattoirs at Clacton and Eye and Ipswich butcher.

## **Sustainable procurement**

We seek to reduce off farm carbon emissions wherever possible (see Carbon Policy for details).

## **Carbon storage in the soil**

We use permanent pasture leys to capture and store carbon in the soil, as well as adding carbon to the soil through the addition of locally produced waste organic mushroom compost (from Capel St Mary) and rearing our own free range animals onsite using regenerative agriculture techniques which already offer very significant carbon sequestration potential.

Our primary aim is to sequester more carbon in the soil than we emit through farm activities: reducing the farm activities' emissions and maximising carbon sequestration as much as possible.



**The Oak Tree**  
Low Carbon Farm