

EQUIPMENT REVIEW

Seeds of the Harvest

The Suffolk Wildlife Trust's story of how the wish to harvest seed efficiently from wild plants was made a reality.

Habitat creation is always a challenge and obtaining seed of local provenance is often difficult, so the need for a machine to collect seed locally for small projects was identified.

The story of the seed harvester began in a typical conversation. The Trust's conservation team wanted a seed harvester, but funding was limited and some way short of purchasing an off the shelf model. The next move was to persuade one of our site managers with engineering skills to design and build the machine and with English Nature funding a tailor made harvester was created. Having looked at a number of machines and assessed their various attributes and drawbacks a number of criteria were identified for the SWT machine.

Firstly the machine had to be simple and strong. Simple enough that it didn't need a mechanic or engineer to operate it and strong enough to cope with varied terrain .

The machine had to be self powered to enable it to be operated using a variety of towing vehicles.

It had to be capable of collecting seed from a range of vegetation, from tall flower meadows to very low growing heathland grasses. Any one who has embarked on arable reversion to heathland will know how prohibitively expensive seed can be, if you can get it.

Rough sketches of a prototype machine were shown to a local company, SCH Supplies, who manufacture machinery for use with garden tractors and the specification was agreed.

SPECIFICATION

The basis of the unit is a mini tractor-mounted leaf sweeper. The PTO gearbox was removed and a 5hp Honda engine installed as the power unit. The whole unit is cradled in a cantilever frame complete with axle and tow bar.

The cantilever system allows the sweeper to operate from as low as 75mm up to 300mm. The engine operates at little over tick over which should prolong engine life. In an emergency the engine can be killed quickly by use of a 'dead man' line operated from the towing vehicle.

The tow bar has a 50mm ball hitch so it can be towed behind a variety of vehicles from a 4x4 to a quad bike or small tractor. The unit can be towed in line when travelling between work areas and offset when working in the field. Low ground pressure tyres prevent it being towed along the highway, so a trailer is required for moving between sites.

THE RESULTS

The harvester was successfully trialled in 2005, collecting seed from an SSSI meadow in July, acid grassland in August and from stands of heather in October.

There is no intention to harvest seed for resale as seed quality and germination rates cannot be assured. However, the seed will be of guaranteed local provenance and can be used in its own right or as a supplement for habitat creation.

The machine will be used on a number of projects throughout Suffolk in 2006.

The set up is available from: **SCH Supplies Ltd**, Woodlands, Holbrook, Ipswich IP9 2PT
tel. 01473 328272

Cost: c.£3,500

Further information can be obtained from:

Susan Stone or Alan Miller at Suffolk Wildlife Trust, The Green, Ashbocking, Ipswich, IP6 9JY
tel. 01473 890089 (Susan) or 01728 833405 (Alan) or **SCH Supplies Ltd**, tel. 01473 328272

E mail: alanm@suffolkwildlife.cix.co.uk