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BENEFITS FOR WILDLIFE

The traditional crofting practice of stacking arable crops has many benefits for the biodiversity of the machair. Traditional harvesting methods are beneficial to ground nesting birds, flowers and invertebrates.

Crops of oats, rye and barley are harvested by traditional binder machinery and left to dry in the field in stacked sheaves to be used as cattle feed or threshed for seed. These standing stacks provide a valuable food source for seed eating birds like the rare corn bunting. This food source is prolonged when the stacks are fed out to cattle through the winter months.

The Uists hold one of Scotland's remaining corn bunting populations and a lack of winter seed is one of the reasons why its population has declined so rapidly over recent decades. The stacking and feeding out of this crop will help to maintain the Uist corn bunting population.

The harvesting of the crop with a traditional Reaper Binder machine has benefits too, since the crop is cut later than with modern silage bailers. This allows ground nesting birds time to fledge their young and arable plants chance to flower and set seed. This method of harvesting also leaves more residue seed in the field available for birds than when harvesting with a combine.

The Scottish Rural Development Programme has funding available to support the stacking of arable crops as part of its Rural Priority Biodiversity application scheme. Crofters who enter this scheme can apply for annual payments to manage cropped machair by harvesting with a binder and making stacks.

ANNUAL CROFTING CYCLE - STACKING

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Stacks are fed out to cattle in winter providing a valuable seed source for seed eating birds.			Traditional crops of oats, barley and rye grass are sown in late spring.						Crops are harvested with a binder machine and stacked in the field to dry.		



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The traditional stacking of crops is in decline as a crofting practice since it is more labour intensive than harvesting for silage bales or combining for seed but there are still numerous crofters in the Uists who continue to maintain this practice as their preferred method for the drying of crops for seed and fodder

HARVESTING

Traditional binder machines are mounted on the back of a tractor. Some models allow for an additional person to be seated on the back of the binder so that the height set for the cutting and binding mechanism can be adjusted as the machine operates.

Harvesting is facilitated by wooden boards which rotate and lay the standing crop down against a cutting mechanism. The cut sheaves are rolled along a moving canvas into the binding mechanism which ties bundles of sheaves together and pushes them out to lay in the field ready for stacking. There are a handful of crofters who still harvest and tie crops by hand.

FROM STOOKS TO STACKS WHAT ARE THE ISSUES?

The traditional method for making stacks has been handed down through generations. The finished style varies but every stack starts with the standing of sheaves of corn that have been harvested into small tied bundles to form stooks. Stooks are formed by stacking three to six tied bundles of corn sheaves together.

The stooks are left for one or two weeks in the field to dry before being built up into small stacks made from about eight to ten stooks. After drying these small stacks are then built-up to form the final stack, which can be up to four metres high.

The stacks are built in a way that maximises their structural robustness to aid the drying process and withstand the effects of strong winds. Nets are laid over the finished stack and often weighted down with large stones tied to the bottom. The stacks are then either threshed for seed or fed out to cattle over the winter.

Machinery

Traditional binder machines are becoming increasingly difficult to maintain as parts wear out and become redundant. The canvas, which holds and moves the tied sheaves of corn through the binding mechanism can be particularly difficult to keep in good condition. New parts are not available for these machines and their maintenance is reliant on sourcing spares from redundant machines.

Crop damage

The late harvesting of crops for stacking means that the crop is left in the ground longer which makes it more vulnerable to damage from adverse weather or feeding geese. Standing stooks and stacks in the field are also vulnerable to these factors which increases the risk of the loss of winter fodder for cattle or seed supply for the following year.

THE WAY FORWARD?

Methods of crop protection are available which significantly reduce the likelihood of damage to the standing crop or stooks and stacks by feeding geese. The use of kites on poles and the protection of crop areas with temporary fencing has been proven to be an effective way to keep geese away from the crop. Government and EU funded initiatives has also enabled the coordination of crop protection and goose scaring schemes in the Outer Hebrides.

Modern reaper binder machines are available which do not require canvases and have more simple mechanisms than the traditional style machines. These modern machines may enable the continuation of the stacking of arable crops as a relevant practice in support of the crofting heritage and to the benefit of the machair wildlife.

KEY POINTS

- Stacks provide an over-winter seed source for birds.
- Traditional harvesting methods benefit ground-nesting birds, flora and insects.
- Modern machinery is available to help maintain stacking as a viable crofting practice.

USEFUL CONTACTS

The Scottish Rural Development Programme

www.scotland.gov.uk

RSPB

Jamie Boyle: 01876 560287

Scottish Natural Heritage

www.snh.gov.uk

Comhairle nan Eilean Siar

www.cne-siar.gov.uk/biodiversity



The Conserving Scottish Machair LIFE+ Project supports the binding and stacking of arable crops. Assistance may be available in your area through the provision of machinery, man-power or financial support. Contact the project for further information.



CONTACT INFORMATION

We're on the 'net! For more information, please visit www.machairlife.org.uk

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