

## The Last Woollen Mill

At one time, the sound of heavy machinery and the distinctive scent of wet wool being worked would have wafted from mills across the rural landscape, but today Knockando stands alone.

by Richenda Miers

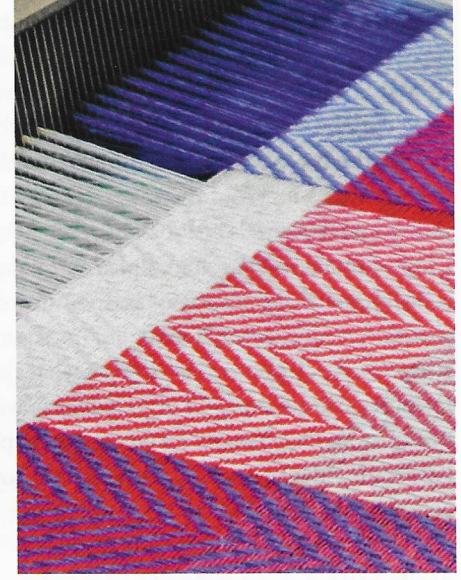
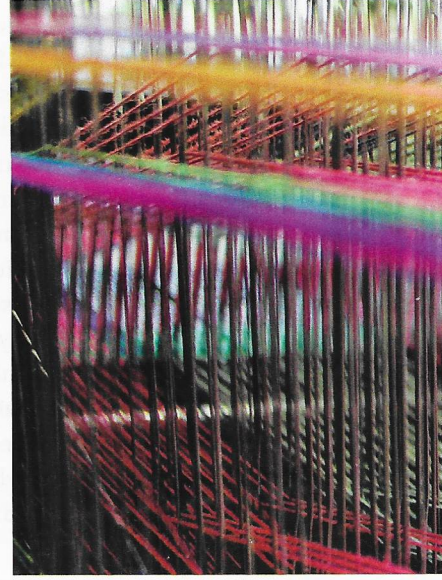
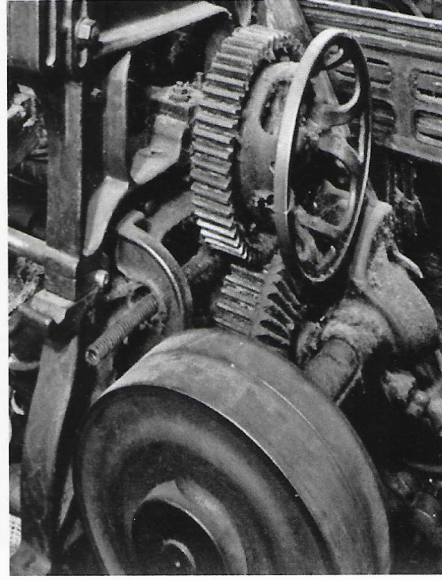
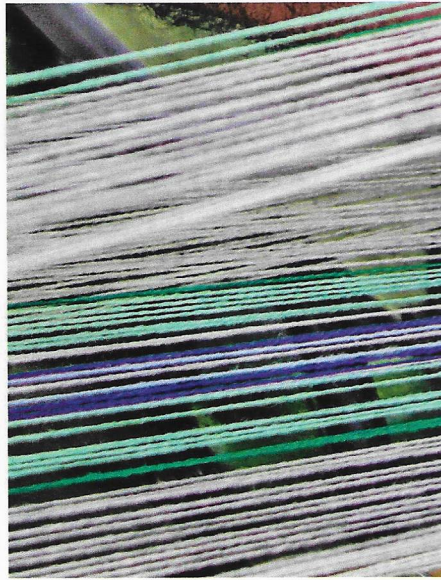
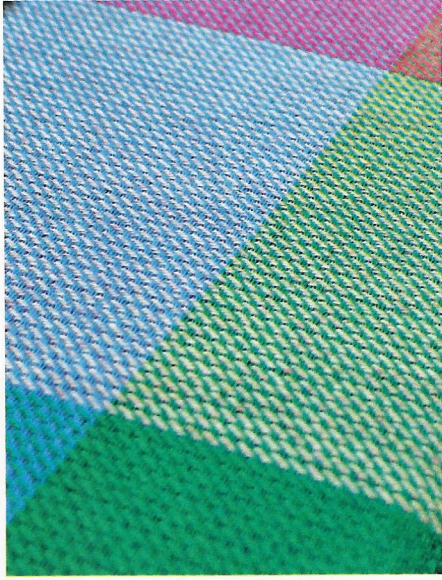


Photo © Knockando Woollmill Co Ltd

**N**ever again shall I be able to see a length of tweed, or tartan, or any sort of woollen cloth without remembering my tour of Knockando Mill, near Aberlour in Strathspey. The mill is of international importance, being one of the only surviving woollen mills of its kind in the world with some of its original machinery still in operation; seeing it in action is to witness history and traditional craftsmanship brought to life.

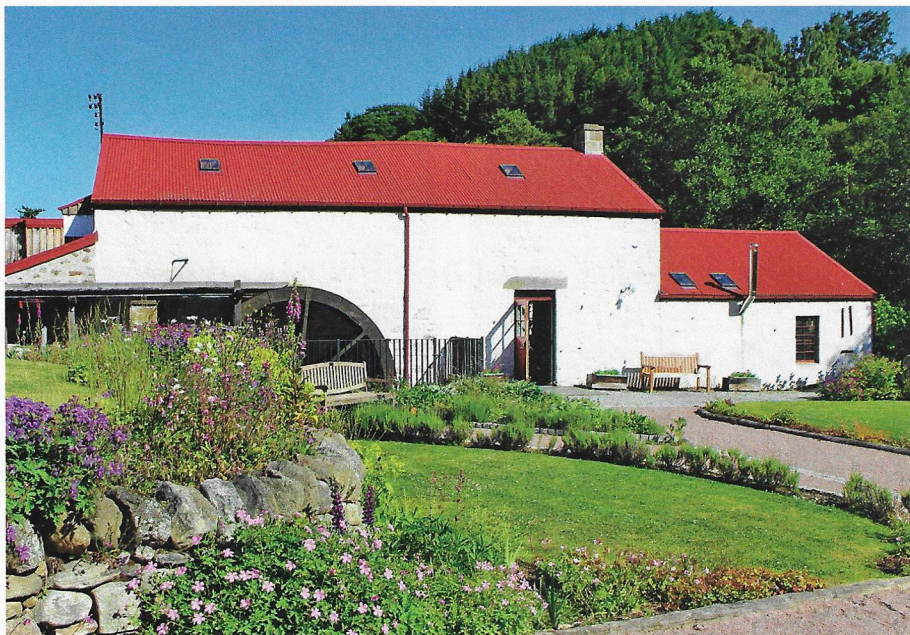
*Opposite page — Top row (left to right): A basket of yarn, finished cloth, a close-up of a Victorian carding machine; Middle row (left to right): Vertical threads waiting to be woven, antique machinery, yarn drying; Bottom row (left to right): A finished blanket, brightly colored threads, weaving a scarf. Above: A historic photo of “Winnie” in the blanket room of the old shop.*





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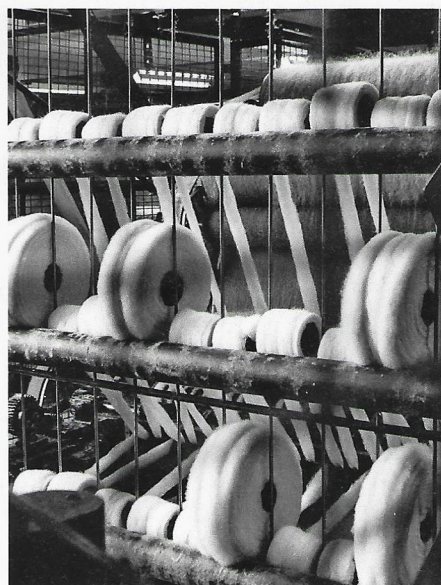
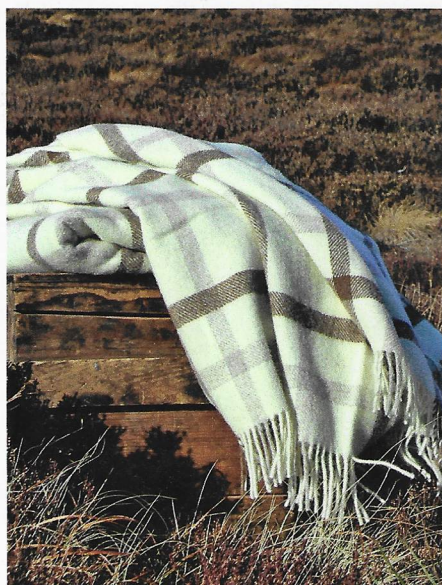




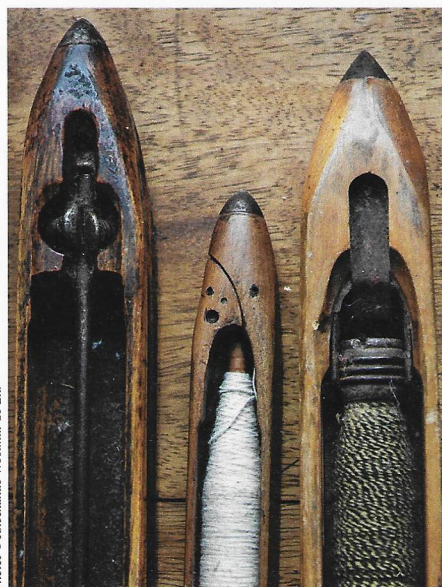
had a cloudless sunny day for my visit and chose the back route from Grantown-on-Spey, following the river on a twisting rural road with magnificent views. On the way I managed to avoid running over a red squirrel who was enjoying the sun ahead of my wheels, so I was already in a good mood when I arrived at the remote cluster of buildings that lies tucked away above the River Spey in the midst of ancient farmland.

In the old crofting days, after the sheep had been sheared and the fleeces scoured (washed), the carding, spinning and weaving were usually done at home. But the bothies were not big enough to cope with the waulking (soaking, beating and shrinking the cloth to make it thick and felted) or the drying, and so most crofting communities had a waulk mill.

There was certainly a mill at Knockando by 1784, probably earlier, and the site was worked continuously for well over



*This page (clockwise from the top): The old waterwheel still turns outside of the restored mill building; “Slubbings” are worked into woollen strands, then twisted into yarn; The garden and old shop; Antique wooden shuttles; A finished throw. Opposite page: Workers take a break outside the old millworks.*



Photos © Knockando Woolmill Co Ltd



200 years. During the First World War, the mill supplied hundreds of blankets for troops on the Western Front, and, though it was still in production, the remoteness of its location probably saved its machinery from being purloined to make weapons during the Second World War.

By the end of the 20th century, the mill complex was on its last legs. And so, in 2000, the Knockando Woolmill Trust was set up and raised enough funds to restore

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on the outside wall of the mill. Now skilfully restored, it is driven by water conveyed by a burn from the mill pool above, which runs along a lade and then splashes down onto the paddles, pushing the wheel in a clockwise direction with its force. No longer used as the power source — electricity arrived at Knockando in the 1940s — the waterwheel is kept running to enhance the sense of stepping into the past.



Photo © Knockando Woolmill Co. Ltd

the derelict buildings and most of the machinery, which together are listed Category A in acknowledgement of their significance to the rural industrial heritage. With the help of Historic Environment Scotland, the trust was able to employ a “craft fellow” trained in the skills required to work the carding machine, which dates back to 1870 and is the oldest of its kind still in operation, the spinning mule and the Dobbross loom.

The meticulous restoration has en-

abled the mill (which opened to the public in 2010) to be operated once again, using traditional methods, so that visitors can witness the whole process of spinning and weaving as it was done 150 years ago. On arrival, you walk through the former kitchen garden — which was redesigned in 2013 and grows plants that were used for dyeing the wool — and can admire the work of the volunteers who maintain it. Everything is composted and reused.

Next, you see the great overshot wheel

From the moment you enter the old mill complex, you are captivated. A mass of tangled fleeces greets you, heaped up in a big container. They have already been scoured, losing half their weight. Now, they are passed over huge toothed rollers that pull out the tangled wool, in the same way as a hairbrush does its work, in a process called carding. The fibres are combed into loose, soft ropes about the circumference of a middle-finger-and-thumb circle, and these



“slubbings” are then compressed into woollen strands, or “rovings.” These must then be twisted to give them strength, so they are wound onto the spinning mule, which lumbers backwards and forwards, its spindles twisting continuously, and the result is wool as we know it for knit-

The warp comprises hundreds of vertical threads, deftly separated and fed by hand between upright metal spikes and secured at the top and bottom of the loom. These are then raised and lowered in turn, so that shuttles carrying the wool can be shot backwards and forwards

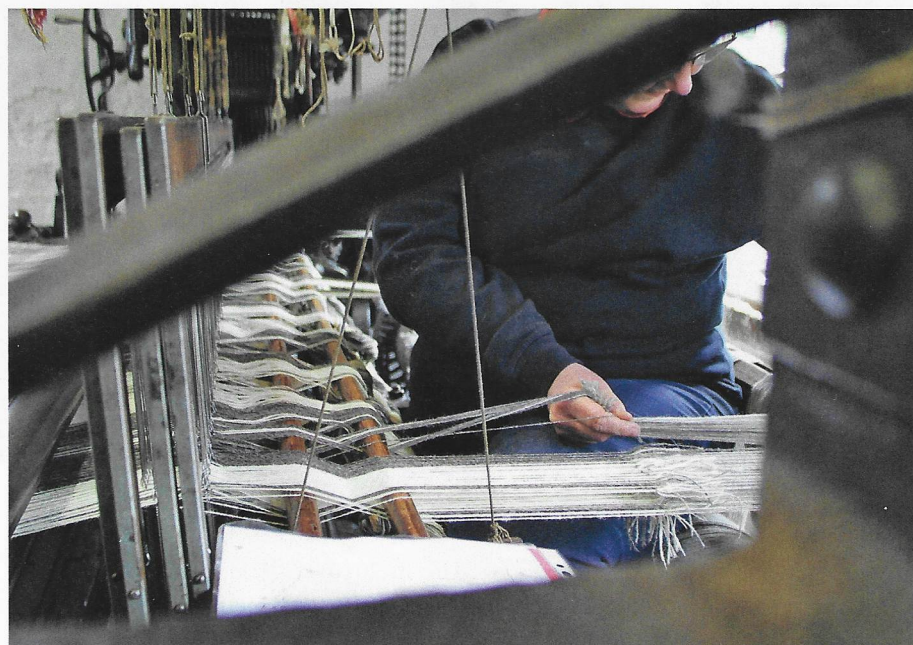
pattern, or one with a series of shapes against a background of squares and rectangles, the variously coloured threads of the warp and the weft must be manipulated to produce a perfect symmetry. All this is done manually, requiring the intense concentration of the operator, who,

*All this is done manually, requiring the intense concentration of the operator, who, if he were to relax for even a moment, could spoil the entire product.*



Photos © Knockando Woolmill Co Ltd

*This page (clockwise from the top): A worker running one of the original Dobcross looms; Setting up one of the current mill's working looms; The café and shop, made out of wood from old byres. Opposite page (clockwise from the top): Master craftsman Hugh Jones at work; A Siloch tweed being woven; A stern warning over the visitor centre door.*



ting. Depending on the thickness required, different numbers of yarns (or “plies”) are twisted together.

In the weaving shed, you can watch the loom at work, creating the tweeds and woollen cloth used for rugs, blankets, scarves, shawls and other clothing.

through the gaps to create the weft, or horizontal threads.

It all becomes clearer when you see it happening. But this is just the simple bit — the process for weaving cloth that is to be all one colour. For any coloured design, be it a tartan, any striped or checked

if he were to relax for even a moment, could spoil the entire product.

I was fortunate enough to meet Knockando's craft fellow Toby Tottle, who explained each maneuver to me in graphic detail as his nimble fingers worked the elusive strands. Seeing him



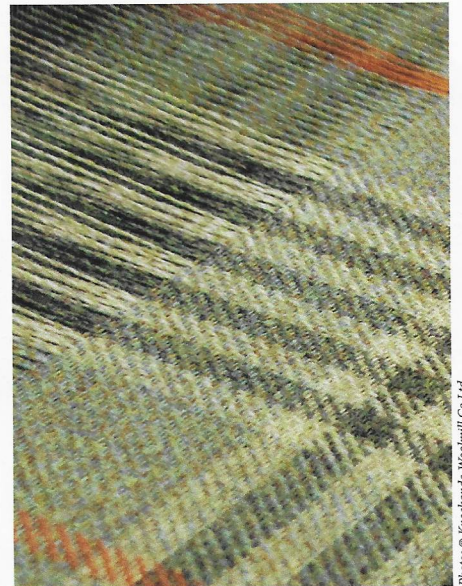
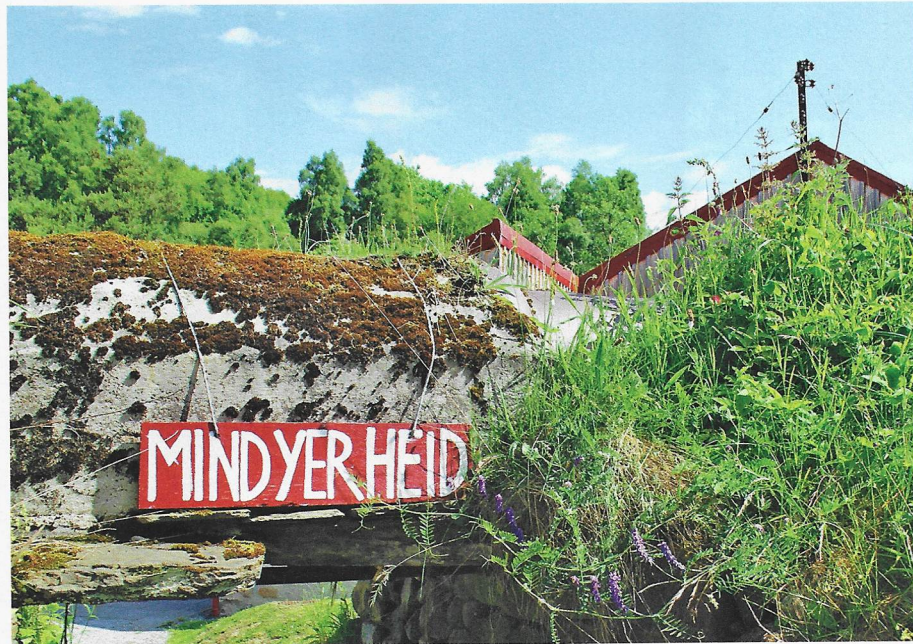
at work, I was reminded of watching my grandmother knitting a Fair Isle jersey for my father when she was in her 70s. Many different coloured wools hung down into her lap as she sat there chatting to us, hardly looking at what she was making as she flipped the various wools over her

use. This is now done off site, but you can still see the teasel gig (it's not operational at the moment), which used wet teasel heads to do the "raising" — the process that gives a soft finish to blankets, rugs and scarves. Finally, the cloth is washed. In the old days it was hung on

think of all the modern devices we take for granted today: our computers, washing machines and dishwashers, none of which seem to last for more than about five years before we have to bin them and start again. By contrast, the machines at Knockando, with their massive great



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Photos © Knockando Woolmill Co Ltd

knitting needles and the beautiful, symmetrical design emerged. At the time, I didn't appreciate her skill, but I now realize that it was similar in some ways to the craftsmanship demonstrated by Toby.

When the weaving is done, the cloth must be finished according to its ultimate

the frame you can see by the burn — the tenter frame — where it was secured and stretched tight by hooks (hence the expression "on tenterhooks").

The wool mill's antique machinery, some already second-hand when it was installed all those years ago, makes one

rollers, cogged wheels and intricate metal parts smoothly carding, teasing, spinning, warping and weaving, have a great many more years of life left. At the moment, there are three processes that still can't be revived in-house until further restoration work can be carried out and operators trained. These are the scouring of the fleeces before they are carded; dyeing the yarn (except in the small batches that Toby does by hand); and finishing ("raising") the woven cloth.

The first of the buildings in the group is a one-story weatherboarded hut still with the original sign on its roof reading "Knockando Woolmills Warehouse." This is where the

*Continued on page 71*



crofters used to bring their fleeces to be processed and where the finished products were sold. Beside it is the cottage, the oldest building on the site, which once had a heather-thatched roof and an open fire in the middle of its main room.

**H**ere you can read about the history of the mill, and there's also an excellent short film providing a comprehensive lesson in the whole process of wool manufacture, narrated and demonstrated by master craftsman Hugh Jones. I could have watched it several times and learned more at each viewing. It was Hugh who trained Toby, but, unfortunately, he left the mill last year before instructing anyone else on how to work the Dobcross, a late 1800s loom that still awaits restoration. (There are two Dobcross looms at Knockando, both in need of repair, so one will be taken to pieces to provide the necessary parts to make the other serviceable. This is an eagerly awaited step forward.)

Beside the cottage is the mill house, now used as an office and design studio. This was the home of Alexander Smith, who moved to Knockando from Aberdeenshire in 1863 and mechanized the mill. He rose in the world and built himself a modern house from an old byre, installing many 19th-century mod cons; his wife, Emma, lived to the age of 100 and was still knitting well into her 90s.

The final building in the row is the visitor centre, set slightly back from the others and accessed through the low arch that supports the lade, with a stern and very necessary notice warning: "Mind yer Heid." This building was created out of old byres and has now been restored to provide a café and a shop selling fine shawls, scarves, coats, rugs, lengths of tweed and tartan all made at Knockando, as well as handbags and teddy bears made from Knockando cloth and outsourced to artisan workers.

Most of these products are made on the modern machines in the Conservation Training Workshop, which stands behind the old mill, its two Dornier looms dating from the 1980s. The machinery here is still run in the traditional

manner, set up in the same way with the warp and weft principle and just as labour intensive, but is larger and much faster. The weaving process that you watched in action in the old mill is only for demonstration purposes, on one of the Dobcross looms, but until it is restored, it isn't able to produce enough to make a profit. However, all the undyed yarn used at the mill is carded and spun on the historic machines.

When you have had your tour of the working mill, it's worth strolling up to the millpond, which is kept as weed-free as possible so as not to choke the lade. From this tranquil setting serenaded by bird song, it's interesting to try to conjure up what life must have been like in 1784, when the waulk mill was first mentioned in the parish records. This was before the Industrial Revolution touched rural Scotland, when the machinery we see today was still several generations in the future. At the time, Knockando was operated by a family called Grant, whose lives were simple and arduous; they did all the mill work by hand or with help from the waterwheel and lived entirely off the land. There are many songs still known from this period, sung by the women as they sat round a table waulking and pulling the fleeces in the dim light, warmed by a central fire. They did the spinning on small spinning wheels and the weaving on simple hand looms in their houses. Some of their animals may have lived indoors with them, fenced off at one end of the room. Their social lives revolved round ceilidh-type gatherings in the bothies, with songs and stories and reminiscences.

Inspecting the treasure trove of products in the shop I couldn't help thinking of the difference between an original creation and a mass-produced one — the difference, perhaps, between a packet of sliced bread bought in a supermarket and a delicious loaf from an artisan bakery. Of course, there is no comparison and when you have watched the craftsmen at the mill creating those beautiful fabrics and know that every strand of wool has been manipulated by human hands using tra-

ditional techniques and traditional machines, rather than shot out at high speed on robot-like machinery, you will want to own one of their fabulous products.

Knockando Mill is run as a charity, entirely supported by donations and trust funds. There's no charge to go round it, but visitors are asked for a suitable donation and, I'm sure, are more than happy to empty their wallets in order to help maintain this amazing time warp. The trust desperately needs more funding if it is to continue to preserve this unique place and complete the restoration. All profits from their sales go back into restoring and maintaining the site and equipment.

As I write, I'm looking out my window at the large flock of sheep grazing in the fields around my house. They are ripe for shearing and, in my mind, some of their shaggy, extremely dirty fleeces might very soon be on their way to be transformed into beautiful cloth woven on those historic looms at Knockando. **SL**

*Richenda Miers has written, among many other things, two travel books and many articles about Scotland. Although she has traveled extensively and written about other parts of the world, Scotland remains her first love.*

#### FURTHER INFORMATION

The visitor centre and shop are open daily, except Mondays, and a 45-minute guided tour is offered on Tuesdays and Thursday at 10:30 a.m. and 2 p.m. Because Knockando is a working mill, it's best to call ahead to see if production (carding, spinning, weaving) will be taking place on the day you plan to visit. For more information or to book a place on the tour, which costs £8 for adults (about \$10.40), visit [www.kwc.co.uk](http://www.kwc.co.uk), e-mail [kirstin@kwc.co.uk](mailto:kirstin@kwc.co.uk) or telephone 01340 810 345\*. Knockando Woolmill, Knockando, Aberlour, Moray AB38 7RP.