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## Purpose-built subsoiler delivers a level finish

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For many one-man contracting outfits, finding a niche service can be the key to success. For Raymond Copland, a specialist grass subsoiler is proving to be just that, as Mervyn Bailey finds out.

With two wet seasons now behind us, many farmers will be looking to rectify compaction issues, but with grassland there are not that many options. Traditional subsoilers can leave a ridged surface that makes following operations a rough ride, and starting from scratch with a plough can be costly.



But Lockerbie-based contractor Raymond Copland believes he has the solution, with a purpose-built grassland subsoiler.

“I had seen the Pan Buster at a couple of shows and thought it was a good idea, so I decided to get one on demo. I asked Gordon Henderson of East Bowhill Farm, a customer of mine, if he would let me try it in one of his fields,” says Mr Copland. “Initially he was not keen, as he thought it would leave a ridged finish like a tatty field, but after seeing the level finish, he got me to do a couple of other fields.”

The four legs are spaced 620mm apart, which Mr Copland says is key to getting the even lift across the machine's working width.

Produced by Erth Engineering, the subsoiler uses four discs to cut through the sward. Each of the discs can swivel and their working depth can be changed by altering the tension on a chain and spring arrangement that also provides a degree of break-back if they encounter a stone.

The four curved legs have hydraulic auto-reset and are fitted with McConnel Shakerator points.

“The point is positioned well ahead of the leg so it starts the lifting action early,” says Raymond. “There is plenty of room between the legs and the rear roller so the soil has time to settle before it is firmed again.”



Compared to traditional subsoilers, the wings are also narrower and Raymond says that, even when they wear, they still provide enough lifting action. The plain roller packer is hydraulically adjustable and has a scraper running along its full length to keep it running clean.

Of the work he has done over the last month or so, the working depth is usually around 225 to 300mm (9 to 12in). A 155hp Claas Arion 640 pulls the subsoiler with ease.

“It is important to have a dig down with a spade to determine where the compaction is, as there is no point going deeper than you need to,” he explains. “I can usually cover over two acres per hour and use between 3.4 and 4.0 litres of fuel per acre, depending on the working depth and the type of soil.”

As a contracting service, Mr Copland charges around £37 per ha with the farmer supplying the fuel.

“It works just as well in arable as it does in grassland,” says Mr Copland.

## Copland Agricultural Services

- **Location:** Lockerbie, Dumfriesshire.
- **Tractor:** Claas Arion 640
- **Work carried out:** subsoiling, track grading and general agricultural work.

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