

An analysis of agricultural activity on Small-Scale Holdings (less than 10 ha) Scotland and Aberdeenshire (2000 – 2011) Lee-Ann Sutherland, Keith Matthews, Kevin Buchan and Dave Miller James Hutton Institute, Scotland

## Introduction

This report addresses recent changes to land use on holdings of less than 10 ha in Scotland between 2000 and 2011, based on analysis of agricultural census statistics. The analysis is part of on-going research at the James Hutton Institute on small-scale land management, which includes consultation with industry stakeholders and small-scale land holders, to assess the implications and likely causal factors underpinning the statistics presented here. The report addresses Scotland as a whole, with a sub-focus on Aberdeenshire region<sup>1</sup>, in North East Scotland. A companion report specifically addressing 'lifestyle land management' in Aberdeenshire is also available<sup>2</sup>.

# Summary of Key Trends on holdings of less than 10 ha in Scotland

Holdings under 10 ha:

- totalled 27 279 in 2011, occupying 89 482 ha.
- increased in number by 13.3% from 2000 to 2011.
- comprised 19.6% of Scotland's reported agricultural labour in 2011; this labour is mostly part-time.
- represent 2049 (14.6%) of all holdings with one or more FTEs reported Scotland in 2011.
- appeared to be decreasing their labour, with new smallholdings managed on a part-time basis.
- with more than 0.5 FTEs are increasing in lowland areas.
- held 68.7% of total poultry reported in 2011.
- were the only holding size category in which the number of pigs increased.
- saw a 42.1% increase in the number of horses from 2000 to 2011. Every region in Scotland has seen an increase in the number of horses on holdings of less than 10 ha.
- shifted from having 54.8% of the total Scottish glasshouse area in 2000 to 11% in 2011.
- were increasingly being registered as farm businesses, although only 44.3% of the census holdings in Scotland under 10 ha reported being registered as farm businesses in 2011.
- included 22.7% of Single Farm Payment (SFP) recipients reported in Scotland in 2009. However, only 20.1% of holdings under 10 ha category claimed the SFP.
- included 5.6% of Scottish Rural Development Programme claimants.

Although the highest numbers of small-scale holdings (less than 10 ha) were found in traditional crofting areas, the increase in numbers of small-scale holdings was largely in lowland regions.

A quarter of the small-scale holdings in Scotland were identified as 'crofts' in the agricultural census in 2011. Small-scale holdings with croft land had similar labour patterns to those which were not identified as crofts (in terms of part-time and full-time holdings).

Small-scale holdings were maintaining or increasing their sheep flocks in lowland areas, whereas substantial decreases were observed on small-scale holdings in highland and island areas, and on larger holdings (from 2000 to 2011).

Cattle increased in number on holdings of less than 10 ha (although decreasing on larger holdings). However, the number of small-scale holdings with cattle decreased, suggesting intensification of cattle numbers on those holdings under 10 ha which retained their herds. Sheep were the most common animal (livestock or horses) produced on holdings under 10 ha, although numbers declined from 2000 to 2011. The greatest increase was in the number of holdings with poultry, followed by those with horses.

There was an increase in both recreational/self-provisioning and commercial-sized pig, poultry and glasshouse production on holdings of less than 10 ha.

39.2% of holdings under 10 ha (representing 35 110 ha) appeared unmanaged, or rented out.

The percentage of holdings under 10 reporting claiming the SPF was much higher in the traditional crofting areas than in lowland regions.

## Background to the research

Small-scale land management has a lengthy history in Scotland, where 'crofting' stems back to the Highland Clearances of the 19th century. Crofting acts have provided security of tenure to crofters since 1886, with reforms throughout the 20th century. Contemporary crofts are defined by the Scotlish Crofting Federation as:

A small agricultural unit, most of which are situated in the crofting counties in the north of Scotland being the former counties of Argyll, Caithness, Inverness, Ross & Cromarty, Sutherland, Orkney and Shetland, and held subject to the provisions of the Crofting Acts<sup>3</sup>.

As such, crofting is a distinctive legal type of agricultural holding within Scotland, and subject to specific legal protections and requirements, such as occupancy by the owner or tenant and maintenance of the land in good condition; permission is required by the Crofting Commission for any change in tenancy. Up until the Second World War, crofting was primarily a subsistence form of agriculture; owing to the small size of holding off-farm income has usually been necessary. Crofting is thus a pluriactive agricultural form.

Crofting has received considerable policy attention in the past decade, with new reforms in 2003, 2007 and 2010. The most recent legislative reforms in 2010 aimed to ensure that crofts are occupied by their owners or tenants, that land is not neglected, crofts are used for useful purposes, and to curb speculation. The content of these proposed reforms suggest considerable concern by policy-makers about the potential for recreational or absentee occupation of crofting land.

Small-scale land management holding is not limited to crofting: the Crofting Federation suggests that the average croft is about 5 ha in size<sup>5</sup>, whereas only 26% of holdings under 10 ha were identified as crofts in the 2011 agricultural census. It is these non-croft small holdings which are of particular interest in this research: to date they have been largely unrecognised in Scottish agricultural policy, and little is known about how these small units of land are managed. In this research, we review trends in land management on all census holdings of less than 10 ha, in order to provide an overview of the range and types of changes occurring in the management of small-scale holdings in Scotland.

## **General Statistics for Agriculture in Scotland**

- In 2011, the Scottish agricultural census reported 52 542 agricultural holdings, which are categorised by the amount of agricultural land: under 10 ha, 10 to <20 ha, 20 to <50 ha, 50 to <100 ha, 100 to <200 ha, and 200 ha and over. This number of holdings had increased by 6.0% since 2000, coinciding with an increased total usable agricultural area of 46 931 ha (0.9%). The total usable area reported in 2011 was 5.5 million ha.</p>
- Labour on agricultural holdings in Scotland totalled 40 418 FTEs in 2011, a decline of 10.7% in reported labour since 2000. This coincides with a 3.4% increase in standard labour requirements (SLR<sup>6</sup>) since 2004. Scotland's total agricultural SLR was 52 543 FTEs in 2011. This estimated labour requirement is thus considerably higher than actual labour reported in the census.
- Scotland reported 23 563 Single Farm Payments in 2009<sup>8</sup>, representing 43.3% of holdings. Of these, 4744 holdings reported no labour, and 1943 of these were under 10 ha (but 340 were over 200 ha).

- In 2011, holdings in the Scottish agricultural census reported
  - 14 526 394 poultry, an increase of 1.6% since 2000.
  - **36 878 horses, an increase of 60.7%**. This included a 58.1% increase in horses held on holdings registered as farm businesses<sup>7</sup> from 2000.
  - 18 03 937 cattle, a decline of 11.1% since 2000.
  - **389 995 pigs, a decline of 28.6%** since 2000.
  - 17 949 ha of horticultural area, an increase of 37.1% since 2000.
  - 3 756 997 square metres of glasshouse area in 2011, an increase of 252.1% since 2000.
  - 34 720 holdings registered as farm businesses, an increase of 8.5% since 2000.



#### In 2011, Aberdeenshire region reported:

- 7526 agricultural holdings (up by 480 from 2000) and 523 480 ha usable agricultural land.
   This is the second highest number of holdings amongst Scotland's regions.
- The highest number of Full Time Equivalents (FTEs) (reported labour) (5760) of any region in Scotland, despite a 13.3% decline from 2000.
- 17.3% of Scotland's reported poultry, although this had declined by ~ 4 million birds since 2000.
- The most horses reported in any region in Scotland with 17% of Scotland's total.
- The most pigs of any region in Scotland 187 232 in 2011, a decline of 28.8% from 2000.
   This is consistent with a 30% drop in the number of Scotland's total reported pigs since 2000.
- 6.8% of the sheep and 15.9% of cattle reported in Scotland.
- 11.2% of the horticultural area and 1% of the glasshouse area in Scotland.
- The highest number of holdings claiming the Single Farm Payment in Scotland (14.3% of Scotland's total);
   less than half of holdings claimed this subsidy.

# Numbers of holdings and land occupied by holdings under 10 ha in Scotland

Over half of the census holdings<sup>9</sup> in Scotland are less than

10 ha in size: In 2011, small-scale holdings represented 51.9% of agricultural holdings but only 1.6% of useable agricultural area (UAA) (89 482 ha). This category of land holding grew the fastest of any size category, both in terms of numbers and land area. The amount of agricultural land in the under 10 ha category (increased by 13.3%, or by some 10 506 ha from 2000 to 2012. This is part of an overall increase in UAA reported in the census.

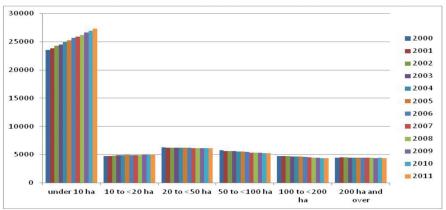


Figure 1: Numbers of census agricultural holdings in Scotland 2000 – 2011

- The highest numbers of small-scale holdings (less than 10 ha) were found in traditional crofting areas in 2011:
  Eilean Siar (Western Isles) (5404), Lochaber, Skye & Lochalsh, Arran & Cumbrae and Argyll and Bute (3145) and Caithness and Sutherland and Ross and Cromarty (3423). The numbers of small-scale holdings in these regions have remained relatively stable in the past twelve years.
- The increase in numbers of small-scale holdings was largely in lowland regions in 2011: Dumfries and Galloway (total of 1584) and the Scottish Borders (total of 981) both saw increases
- of  $\sim$  10%, Clackmannanshire and Fife (total of 837) increased by about 8%, and West Lothian (total of 295), Perth & Kinross and Stirling (total of 1362) increased by  $\sim$  7%.
- The majority of small-scale holdings in Scotland are not crofts. Legal crofts comprised only 26.1% (7112) of Scotland's census holdings of less than 10 ha in 2011, and occupied 26.6% of the land in this category<sup>10</sup>. In total, 10 129 holdings with croft land were identified in the 2011 census<sup>11</sup>, occupying 304 439.6 ha of land<sup>12</sup>.
- Aberdeenshire region had the second highest number of small-scale holdings in Scotland in 2011 (3618), and saw the highest increase in numbers of holdings less than 10 ha (682, or 17.3%) since 2000. This coincided with an increase in the largest size holdings (over 200 ha), and a decrease in the numbers of mid-sized holdings.
- Small-scale holdings occupied 11 978 ha in 2011, about 2.3% of Aberdeenshire region's usable agricultural area.
- Aberdeenshire region reported 238 holdings with croft land in 2011, occupying 2059 ha of land. As Aberdeenshire is not a
  recognised crofting county, this likely reflects holdings which have historically been small-scale subsistence-oriented units.

### Labour

- 19.6% of Scotland's reported agricultural labour is used on small-scale holdings, a proportion which has stayed stable since 2000 at about 7950 FTEs. In contrast, the SLR (standardised labour requirements) for small-scale holdings was 2190 FTEs in 2011, a decline of 25.4% since 2000<sup>13</sup>. This implies reduced agricultural activity.
- The vast majority of the labour on small-scale holdings is part-time, with only 2184 (8%) of holdings under 10 ha reporting one or more full-time equivalents in 2011. Small-scale holdings represented 2049 (14.6%) of all holdings with one or more FTEs reported Scotland in 2011. However, some 16 425 (60.0%) small holdings reported no labour at all (including that of the occupier) in 2011. Small-scale holdings also have the broadest range in terms of reported labour, reaching up to 213.5 FTEs.
- The number of small-scale holdings with one or more full-time equivalents has decreased since 2000 by 8% (whereas total FTEs on small-scale holdings has decreased by 1%). This suggests both that existing small-holdings are decreasing their labour, and that new small-holdings are being managed on a part-time basis. Labour on holdings is generally decreasing in Scotland, reducing by 12% from 2000 to 2011. This suggests that small-scale holdings have experienced less labour loss than larger holdings.
- Small-scale holdings with croft land have similar labour patterns to those which are not identified as crofts: in 2011, there were similar proportions of croft and non-croft holdings<sup>14</sup>



- under 10 ha with one or more FTEs reported labour (~7.4%), and 0.5 or more FTEs reported labour (approximately ~10.7%).
- The number of holdings less than 10 ha and with 0.5 FTEs or less (i.e. part-time small-scale holdings) grew by 6% between 2000 and 2011. However, small-scale holdings with more than 0.5 FTEs increased in lowland areas.
  - In Aberdeenshire region, 14.5% (834.5 FTEs) of the total reported labour in 2011 was located on holdings of less than 10 ha, the only size category where total labour grew. However, the SLR of small-scale holdings was only 3.3%, and had declined by 48.2% from 2000, suggesting decreased agricultural activity.
  - The number of small-scale holdings with more than 0.5 FTE in Aberdeenshire region increased by 7.4% (totalling 304 in 2011), whereas the number with less than 0.5 FTE has increased by 24.9% (3314 in 2011).



## **Production**

By far the most common census "holding type" designation for small-scale holdings is 'specialist forage and grass', which comprised some 15 949 (58.5%) of such holdings in 2011. A distant second, with 3135 (11.5%) were specialist sheep holdings, followed by specialist poultry (6.4%), lowland cattle and sheep (3.9%) and specialist beef (3.3%) (see Figure 2). With the exception of the specialist sheep category, the numbers of holdings in these categories have increased in the period 2000 – 2011, most notably via a **tripling of the number of specialist poultry holdings**. However, there were also notable proportional increases in the size of some of the less common holding types, such as specialist pigs and specialist glass (house) holdings, both of which have also tripled in number over the 2000 – 2011 period.

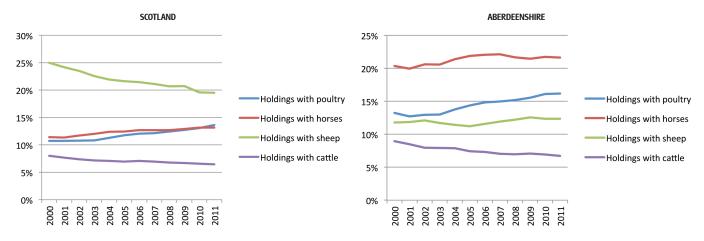


Figure 2: Percentages of small holdings (under 10 ha) with poultry, horses, sheep or cattle, change over time.

### Sheep

- In 2011, 330 036 sheep in Scotland were on holdings of less than 10 ha, representing 4.85% of the total sheep reported in Scotland. This represents a decrease in sheep numbers of 40.0% on small-scale holdings from 2000 (when 550 025 (6.0 %) sheep in Scotland were on holdings of under 10 ha). Total sheep numbers in Scotland declined by 26.0% during this period. Although the under 10 ha category experienced the highest percentage of loss of any of the size categories, far larger declines in numbers of sheep were found on holdings of over 100 ha (24% decline, representing 3.58 million sheep).
- It appears that small-scale holdings are maintaining or increasing their sheep flocks in lowland areas, whereas losses are primarily on small-scale holdings in Highland and Island areas and on larger holdings. Several lowland areas –
   Aberdeenshire, East Ayrshire, East Lothian, Falkirk and South Ayrshire increased the number of sheep on their small-scale units by 30% or more, whereas in highland areas, sheep on



holdings of less than 10 ha decreased dramatically: Caithness & Sutherland and Ross & Cromarty saw decreases of 51.7% of their sheep, Eileen Siar (Western Isles) reduced by 470%, Lochaber, Skye & Localsh, Arran & Cumbrae and Argyll and Bute lost 43% and Shetland reduced by 46%.

- The total number of small-scale holdings reporting sheep declined by 9.7% from 2000 to 2011 (total 5322 holdings in 2011).
   This represents 19.5% of holdings under 10 ha in 2011.
- 1938 of the holdings under 10 ha with sheep were identified as crofts in 2011 (36.4% of holdings with sheep).
- In Aberdeenshire region, 17 702 sheep were reported on holdings of less than 10 ha in 2011 (up from 13 543 in 2000, representing
  a 30.7% increase at a time when the total sheep population in Aberdeenshire region decreased by 14.8%).
- Sheep on small-scale holdings (less than 10 ha) accounted for 3.8% of the total sheep population in Aberdeenshire region in 2011.
- Aberdeenshire region had 6.8% of the sheep in Scotland in 2011, an increase from 5.9% of total sheep in 2000.
- The number of holdings of less than 10 ha with sheep in Aberdeenshire region increased from 346 in 2000 to 477 in 2011 (21.9% increase). Sheep were present on 13.2% of Aberdeenshire region's holdings under 10 ha in 2011.

#### Cattle

- In 2011, 26 761 cattle were reported on holdings of less than 10 ha, representing 1.5% of total cattle reported in Scotland in 2011. This represents an increase of 4.3% from 2000, when 25 647 cattle were reported on small-scale holdings. Total cattle numbers in Scotland declined by 11.1% during this period. The greatest losses were experienced on holdings of 20 to 200 ha, with numbers of cattle on holdings of 200 ha and over declining by only 1.4%.
- In terms of regional variations, there was a decline in cattle numbers on holdings under 10 ha in Orkney and Shetland Islands from 2000 to 2011 (-60.4% and -59.2% respectively), whereas Caithness & Sutherland and Ross & Cromarty remained stable. Inverness & Nairn and Moray, Badenoch & Strathspey saw an increase of 16.3%, whereas Lochaber, Skye & Lochalsh, Arran and Bute saw a decline of 24.0%. Some lowland areas saw small declines (Dumfries and Galloway saw a 5.2% decline) whereas Perth & Kinross and Stirling saw an increase of 134.0%



- and Scottish Borders saw an increase of 56.4%. Increases to cattle on small-scale holdings are thus primarily (but not exclusively) in lowland regions.
- The total number of small-scale holdings reporting cattle declined by 6.6% from 2000 to 2011 (total 1762 holdings in 2011). This represents 6.5% of holdings under 10 ha in 2011. The above statistics suggest intensification of cattle numbers on those holdings under 10 ha which have retained their herds.
- 587 of the holdings under 10 ha with cattle in 2011 were identified as crofts (33.3%).
- In Aberdeenshire region, 4639 cattle were reported on holdings of less than 10 ha in 2011 (up from 4167 in 2000, representing an 11.0% increase at a time when the total cattle population of Aberdeenshire region declined by 8.8%.)
- Cattle on small-scale holdings (less than 10 ha) accounted for 1.6% of the total cattle population in Aberdeenshire region in 2011.
- Aberdeenshire region had 19.1% of the cattle on small-scale holdings (under 10 ha) in Scotland in 2011 (4639 of 24 262).
- The number of holdings of less than 10 ha with cattle in Aberdeenshire region decreased from 263 in 2000 to 243 in 2011 (7.6% decrease). Cattle were present on 6.7% of Aberdeenshire region's holdings under 10 ha in 2011.

#### Horticultural Area

- In 2011, 263.9 ha of horticultural area was reported on holdings of less than 10 ha in Scotland. This represents an increase from 244.4 ha in 2000 (8.0%). During this time period, total horticultural area increased from 13 090 ha to 17 948 ha (37.1%). The under 10 ha category comprised 1.5% of horticultural area reported in 2011. The majority of horticultural area is on holdings of 100 ha or more.
- In terms of regional variations, three upland regions saw high increases (Caithness & Sutherland and Ross & Cromarty increased by 182.7% to 270 ha in 2011 and Lochaber, Skye & Lochalsh, Arran and Bute 228.0% to 35.6 ha in 2011; Inverness & Nairn and Moray, Badenoch & Strathspey increased by 97.6% to 27.4 ha in 2011). Lowland regions also saw increases:
  Dumfries and Galloway increased by 90.0% (to 8.7 ha) but it is notable that Angus and Dundee City and Perth & Kinross and Stirling both decreased their horticultural area (38.4% and 50.1% respectively), suggesting that some of this horticultural land was turned into glasshouse area (see Glasshouse Area section).
- The total number of holdings under 10 ha reporting horticultural area in 2011 was 905. This was an increase of 19.6% from 2001<sup>18</sup> (when 767 were reported).

- 43.0% holdings reporting horticultural area in 2011 were less than
   10 ha in size.
- 99 of the 451 holdings under 10 ha that reported glasshouse area in 2011 were identified as crofts (22.0%).
- In Aberdeenshire region, 16.2 ha of horticultural area was reported on holdings of less than 10 ha in 2011, a decrease of 171% from 2001.
- Less than 1% of Aberdeenshire region's horticultural area is located on holdings of less than 10 ha.
- The total amount of horticultural area reported in Aberdeenshire region (2012.5 ha) increased by 35.5% from 2001.
- Aberdeenshire region had 79 of the 905 holdings of less than 10 ha reporting horticultural area in Scotland in 2011.
   This was a modest increase from 70 in 2001, representing 2.2% of holdings under 10 ha in Aberdeenshire region.

### **Pigs**

- In 2011, 29 256 pigs were reported on holdings of less than 10 ha, representing 7.5% of total pigs reported in Scotland in 2011. This represents an increase of 12.9% (3354 pigs) in pig numbers from 2000, when 25 902 were reported on small-scale holdings. Total pig numbers in Scotland declined considerably in this period, representing a 30.1% decline (reduction of 168 105 pigs). Small-scale holdings were the only holding size category in which the number of pigs increased.
- In terms of regional variations, highland and island regions were varied in terms of changes to pigs on holdings under 10 ha: Caithness & Sutherland and Ross & Cromarty increased dramatically (30670% (from just 112 in 2000), Eileen Siar (Western Isles) increased by 67.1%, although Inverness & Nairn and Moray, Badenoch & Strathspey saw a 96.4% reduction and Lochaber, Skye & Lochalsh, Arran and Bute retained a stable number. The Orkney and Shetland Islands had few pigs on small-scale holdings in 2000 (40 and 47 respectively) but increased these numbers by 950% and 110% respectively. In lowland regions, Perth & Kinross and Stirling saw a 44.3% decrease in pig numbers, and East Lothian and Midlothian a decrease of 42.5%. This suggests the establishment of new commercial pig units on small-scale holdings in some Scottish regions.
- The vast majority of the pigs in Scotland were reported on holdings reporting 50 or more pigs (i.e. commercial holdings). However, there were some 6154 pigs (of 389 995 for Scotland in 2011) not on commercial holdings; 2764 of these were on holdings of less than 10 ha). This number more than doubled (from 1194 to 2764) since 2000. This suggests an increase in self-provisioning or recreational pig production.



- The total number of small-scale holdings reporting pigs saw a major increase from 2000 2011 (122.0%) to 650 holdings (from 2000 to 2011. However, as pigs were only present on 1.1% of small units in 2000, the percentage of holdings under 10 which reported pigs only increased to 2.4%.
- 90 of the holdings under 10 ha with pigs were identified as crofts in 2011 (13.8%).
  - In Aberdeenshire region, 10 848 pigs were reported on holdings of less than 10 ha in 2011 (up from 5136 pigs in 2000). This represents an increase of 111.2%, at a time when the total pigs in Aberdeenshire region declined by 38.8% (by 118 454 pigs).
  - The total number of pigs in Aberdeenshire region (187 232 in 2011) declined by 38.8% since 2000.
  - 5.8% of pigs in Aberdeenshire region are on small-holdings (less than 10 ha) in 2011.
  - The number of holdings under 10 ha in Aberdeenshire with pigs increased from 44 in 2000 to 97 in 2011 (120.5% increase). Pigs are thus present on 2.7% of Aberdeenshire region's small-scale holdings.

#### Glasshouse area

- In 2011, 415 193 square meters of glasshouse area were reported on holdings of less than 10 ha in Scotland. This represents a small decline from 428 886 square metres in 2000. However, owing to major increases in glasshouse area on other holding sizes, particularly in Angus and Dundee City, and Perth & Kinross and Stirling, the under 10 ha category shifted from having 54.8% of the total Scottish glasshouse area in 2000 to 11% in 2011.
- 451 holdings under 10 ha with glasshouse areas were reported in 2011. This represents an 89.5% increase in the number of small-scale holdings with glasshouse area reported in 2000.
- 66.6% of holdings reporting glasshouse area in 2011 were less than 10 ha in size.
- 99 of the 451 holdings under 10 ha that reported glasshouse area in 2011 were identified as crofts (22.0%).

- In Aberdeenshire region, 57 square metres of glasshouse area were reported on holdings of less than 10 ha in 2011, an increase of 200% from 2000.
- 63.7% of Aberdeenshire region's glasshouse area was on holdings of less than 10 ha in 2011.
- The total amount of glasshouse area reported in Aberdeenshire region (84 square metres) increased by 189.7% from 2000 to 2011.
- Aberdeenshire region had 57 of the 451 holdings under 10 ha in Scotland that reported glasshouse area (12.6%) in 2011. This represents 1.6% of the holdings under 10 ha in Aberdeenshire region.

### **Poultry**

- In 2011, 998 million poultry were reported on holdings of less than 10 ha, representing 68.7% of total poultry reported in Scotland in 2011. This represents an increase of 27.8%
   (2.2 million birds) in poultry numbers from 2000, when 7.8 million poultry were reported on small-scale holdings. Total poultry numbers in Scotland were relatively stable during this period, experiencing a 1.6% increase from 2000 to 2011.
- While some upland areas saw major increases in the numbers of poultry on small-scale holdings (Inverness & Nairn and Moray, Badenoch & Strathspey saw a 545.8% increase; Caithness & Sutherland and Ross & Cromarty saw a 291.3% increase) others (Eilean Siar (Western Isle) and Lochaber, Skye & Lochalsh, Arran and Bute) remained constant, whereas Orkney and Shetland Islands saw modest increases (48.3% and 28.3% respectively). Lowland regions are equally varied, with Scottish Borders reporting a 362.0% increase in poultry numbers, and Clackmanchire and Fife a 119.1% increase, whereas Dumfries and Galloway reported a 47.9% increase but Perth & Kinross and Stirling reported only a 1.6% increase. These numbers suggest that intensive poultry production is being developed in some regions, but that this phenomenon cannot be identified as specific to highland or lowland areas.
- The total number of small-scale holdings reporting poultry steadily increased from 2000 – 2011, a 47.2% increase.



However, as poultry was only present on 10.7% of small units in 2000, the percentage of holdings under 10 which reported poultry only increased to 13.6%.

- 98.9% of poultry were held on holdings reporting 1000 or more poultry (i.e. commercial poultry operations). However, some 156 483 poultry were held in smaller groups<sup>15</sup>. Of these, 50.2% were held on holdings of 10 ha or less. Poultry on holdings of less than 10 ha, which do not appear to be commercial (owing to a herd size of less than 1000), increased by 35.6% from 2000 to 2011 (an increase of 20 641 birds). This suggests an increase in recreational and self-provision of poultry and eggs on small-scale holdings. Increases in these numbers were evident throughout highland and lowland regions.
- 730 of the holdings under 10 ha with poultry were identified as crofts (196%) in 2011.
- In Aberdeenshire region, 1.11 million poultry were reported on holdings of less than 10 ha in 2011 (down from 1.35 million in 2000). This represents a decline of 17.5%, at a time when most regions reported increased numbers of poultry on small-scale holdings. Poultry numbers in Aberdeenshire region fell 13.7% from 2000 to 2011, a loss of 397 297 birds.
- Some 44.3% of poultry in Aberdeenshire region was reported on small-scale holdings (less than 10 ha) in 2011.
   This percentage has remained fairly consistent since 2000.
- Aberdeenshire region reported 17.3% of the poultry located on holdings less than 10 ha in Scotland in 2011.
- Similar to Scotland as a whole, the vast majority of poultry in Aberdeenshire was held in commercial-sized numbers (flocks of 1000 or more). The number of poultry held in groups of less than 1000, on holdings of 10 ha and less, increased by 61.5% (an increase of 5301 birds, to the total of 13 920 in 2011). This suggests that while commercial poultry production declined in Aberdeenshire region, recreational or self-provisioning poultry production increased.
- The number of holdings of less than 10 ha with poultry in Aberdeenshire region increased from 389 in 2000 to 585 in 2011 (50.4% increase). Poultry were present on 16.2% of Aberdeenshire region's holdings under 10 ha in 2011.

#### Horses

- In 2011, 13 228 horses were reported on holdings of less than 10 ha, representing 35.9% of total horses reported in Scotland in 2011. This represents an increase of 42.1% (3919 horses) in horse numbers on small-scale holdings from 2000, when 9309 were reported on small-scale holdings. Total horse numbers in Scotland increased considerably in this period, representing a 56.4% increase (increase of 13 302 horses).
- Every region<sup>16</sup> in Scotland saw an increase in the number of horses<sup>17</sup> on holdings of less than 10 ha (2000 to 2011). These increases ranged from 11.0% (East Lothian and Mid Lothian) to 96.4% in Dumfries and Galloway. There was no clear highland/lowland distinction: the second highest increase was Shetland Islands (79.6%), followed closely by Eilean Siar (Western Isles) (77.7%) and Caithness & Sutherland and Ross & Cromarty (77.2%). Scottish Borders reported a 61.9% increase.
- The total number of small-scale holdings reporting horses in 2011 increased by 33.2% from 2000 (total 3587 holdings in 2011).
   This represents 13.1% of holdings under 10 ha in 2011.
- 417 of the holdings under 10 ha with horses were identified as crofts in 2011 (11.6%). Horses are thus disproportionately held on holdings under 10 ha which are not crofts.



- In Aberdeenshire region, 2799 horses were reported on holdings of less than 10 ha in 2011, an increase of 29.7% from 2000.
- 45.5% of horses in Aberdeenshire region were on holdings of less than 10 ha in 2011.
- The total number of horses in Aberdeenshire region (6155 in 2011) increased by 34.8% from 2000.
- Aberdeenshire region had 783 of the 3587 holdings under 10 ha in Scotland in 2011 that have horses (i.e. 21.8%).
- The number of holdings under 10 ha in Aberdeenshire with horses increased from 598 in 2000 to 783 in 2011 (30.9%).

## Unmanaged or rented land

This category refers to land on which it is difficult to say what is occurring. It is included here because it represents a considerable portion of land and holdings in the under 10 ha category. Actual practices may not be adequately captured by the census.

- Just over half of the small-scale holdings in Scotland (18 968 in 2011) reported no livestock (including horses), horticulture or glass house area. The majority (15 214) of these apparently inactive holdings were classified as 'specialist forage and grass', 'fallow' or 'unclassifiable other'. Of these forage and grass, fallow and unclassified holdings of less than 10 ha, 13 263 also reported no labour. It is therefore difficult to say what − if any − land management is occurring on these holdings. These holdings in the under 10 ha category represent 35 110 ha, some 39.2% of holdings. These ha could be rented out¹9 or unmanaged.
- The number of 'rented or unmanaged' holdings of less than 10 ha increased from 12 111 in 2000 to 17 154 in 2011 (41.6% increase). This was the largest increase of any of the holding sizes.

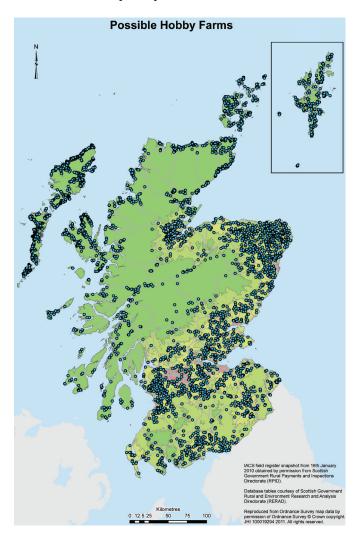
- All regions in Scotland reported an increase in this type of holding, both in terms of numbers of holdings and land occupied.
- 4106 of the 17 154 holdings under 10 ha that appeared unmanaged or rented out were identified as crofts (23.9%).
  - In Aberdeenshire region, 7704.4 ha of 'unmanaged or rented' land was reported on holdings of less than 10 ha in 2011, an increase of 4871.5 ha from 2000 (58.2% increase) from 2000.
  - 7.3% of 'unmanaged or rented' land in Aberdeenshire region was reported on holdings of less than 10 ha in 2011.
  - The total amount of 'unmanaged or rented' land in Aberdeenshire region in 2011 (104 893.9 ha) increased by 46.8% from 2000.
  - Aberdeenshire region had 2395 of the 13 263 'unmanaged or rented' holdings in Scotland in 2011 (18.1%).

# Farm Business Registration and Single Farm Payments

- Less than half (44.3%) of the census holdings in Scotland under 10 ha were registered as farm businesses in 2011, an increase from 40.9% in 2000. Holdings not registered as farm businesses are not eligible for most subsidies or tax deductions. Registration as a business does not therefore necessarily imply commercial management.
- Both the number of holdings under 10 ha which are and are not registered as businesses have increased in number since 2000: those registered as farm businesses increased by 26.4% whereas those not registered as a farm business increased by 8.3%
- Holdings under 10 ha registered as farm businesses comprised 47 866.4 ha of agricultural land in 2011, representing 53.5% of the total land on holdings less than 10 ha.
- All regions experienced increases in the numbers of holdings under 10 ha registered as farm businesses, with the exception of Shetland Islands, which saw a 9.7% decrease from 2000.
- 4372 of 12 177 holdings registered as farm businesses in Scotland in 2011 were crofts (35.9%).
- The under 10 ha category included 22.7% of Single Farm Payment (SFP) recipients reported in Scotland in 2009<sup>20</sup>.
- Only 20.1% of small-scale holdings claimed the SFP in 2009.
- The percentage of holdings under 10 ha which reported claiming the SPF was much higher in the traditional crofting areas (e.g. Shetland: 44.7%; Caithness & Sutherland and Ross & Cromarty: 25.9%; Eilean Siar (Western Isles): 33.6%) than in lowland areas (e.g. Dumfries and Galloway, Perth and Kinross and Scottish Borders), where about 11% claimed the SFP.
- 942 of the 1626 holdings under 10 ha which reported receiving the SFP in 2009 were crofts (57.9%).
- Only 371 holdings under 10 ha reported receiving Scottish Rural Development Programme (SRDP) funding in 2010.
   This represents 1.4% of holdings under 10 ha, and 5.6% of all SRDP claimants<sup>21</sup>.
  - 33.4% of Aberdeenshire region's holdings under 10 ha were registered as farm businesses in 2011.
  - The number of holdings under 10 ha in Aberdeenshire region registered as farm businesses increased by 25.9% from 2000 to 2011, whereas those without farm business registration increased by 21.9%.
  - 11.6% of Aberdeenshire region's SFP claimants are were on holdings of less than 10 ha (390) in 2009.
  - Only 10.8% of holdings under 10 ha claimed the SFP in Aberdeenshire region in 2009.

## **On-going Research**

The analysis of holdings under 10 ha in Scotland is part of a broader research agenda to understand the changing structure of agriculture in Scotland, and identify implications for land use, rural labour and environmental management. The map below demonstrates the locations of holdings under 10 ha in Scotland (but more than 3 ha) which are possible hobby farms: identified holdings reported no employees (outside of the household) and were assessed as having an SLR (standardised labour requirements) of 0.3 FTEs or less. It is evident from the image that these holdings are commonly peri-urban, particularly surrounding Inverness, Aberdeen, Glasgow and Edinburgh, but that a considerable proportion are in highland and island areas, and may therefore be crofts. Many of these holdings are also on Scotland's highest quality agricultural land (yellow in the map). Future research will assess trends in land use on small-scale units, focusing particularly on differences between commercial and hobby (lifestyle, recreational) units.



## **End-Notes**

- 1 The term 'Aberdeenshire region' is used in this report to refer to the NUTS 3 census division of Aberdeen City and Aberdeenshire.
- <sup>2</sup> Sutherland, L., Matthews, K., Buchan, K. and Miller, D. Lifestyle Land Management in Aberdeenshire, Scotland. James Hutton Institute.
- <sup>3</sup> Seven new counties were added in 2010 (Arran, Bute Greater and Little Cumbrae and Moray) http://www.crofting.org/index.php/faqs/67
- <sup>4</sup> Pakeman, R.J. (2010) Changes in the Management of Socottish Machair Communities and Associated Habitats from the 1970s to the present. Scottish Geographical Journal, vol. 127, 267–287.
- <sup>5</sup> http://www.crofting.org/index.php/faqs/67#how-big
- 6 Standard Labour Requirements represent approximate average labour requirements for livestock and crop enterprises. The total SLR for each holding is calculated by multiplying its crop areas and livestock numbers by the appropriate SLR coefficients and then summing the results for all agricultural activity on that holding. One SLR equates to 1900 working hours per year. SLR definitions are set by Defra and used by Scottish Government for the agricultural census.
- 7 Less than half of the horses in Scotland are reported in the agricultural census: the Scotlish Equestrian Association reports approximately 100 000 horses in Scotland (www.horsescotland.org) whereas only 36 878 were reported in the agricultural census in 2011. This is in part because farmers are required to report only those horses owned by their holding (i.e. not liveried horses).
- <sup>8</sup> Single Farm Payment data is only available for 2009.
- The agricultural census covers all agricultural holdings, including very small holdings, although the precise definition of 'holding' is somewhat unclear. It includes all holdings with agricultural land, including those which are not registered as businesses. It does not include common grazing, but does include holdings which have shares in commons. It also does not include forestry on holdings.
- 10 This total excludes common grazing.
- Since holdings may contain multiple crofts, individual crofting tenures are larger (17 725: http://www.scotland.gov.uk/Topics/farmingrural/Rural/crofting-policy). There will be more accurate mapping of crofting land from 2012, with a new register being prepared.
- 12 Census statistics do not appear consistent enough to be useful for assessing change over time in crofting. The numbers of holdings vary widely between 2008 and 2010.
- 13 SLR was first reported in 2004.
- 14 For the purposes of this research, 'crofts' are those holdings which reported including some croft land in the census.
- 15 The number of poultry on small-scale units is likely much higher. Flocks of less than 50 birds do not need to be registered, and can be held in backyards, so would not appear in census statistics.

- <sup>16</sup> With the exception of the city of Edinburgh, which decreased by 6 horses from 2000 to 2011.
- 17 Note that in the regional analysis, and analysis of numbers of holdings, only 'non-agricultural horses' are considered. This represents 97.9% of horses reported.
- 18 2001 data is used here because the data for 2000 appears inconsistent numbers doubled from 2000 to 2001, and then rose steadily, suggesting an issue with the accuracy of reporting in 2000.
- 19 The census includes separate data on land rental, but these numbers are not consistent enough for inclusion.
- <sup>20</sup> Statistics on the SFP are only available for 2009.
- 21 These numbers are too small for regional comparisons to be meaningful, so this has not been attempted.



Books on sale at the Forfar Smallholder Festival September 2012

# Summary of Key Trends on holdings of less than 10 ha in Aberdeenshire Region

Holdings under 10 ha:

- totalled 3618 holdings in 2011. This was the highest increase among Scottish regions (in numbers of holdings less than 10 ha) from 2000.
- occupied 11 977.9 ha.
- reported 14.5% of the region's total agricultural labour in 2011.
- saw an increase in sheep of 30.7% from 2000; during this period the total sheep population in Aberdeenshire region decreased by 14.8%.
- reported 4639 cattle in 2011 (up from 4167 in 2000). This was an 11.0% increase at a time when the total cattle population of Aberdeenshire region declined by 8.8%.
- have 44.3% of poultry in Aberdeenshire region. However, this
  represents a decline of 17.5% of birds on holdings under 10 ha,
  when most regions reported increased numbers of poultry on
  small-scale holdings from 2000 to 2011.

- reported 10 848 pigs in 2011. This represents an increase of 111.2%, at a time when the total pigs in Aberdeenshire region declined by 38.8%.
- reported a 29.7% increase in the number of horses from 2000 to 2011.
- reported 7704.4 ha of 'unmanaged or rented' land in 2011.

Commercial poultry production declined, but recreational or self-provisioning poultry production increased.

Aberdeenshire region had lower than average levels (from Scotland holdings under 10 ha as whole) of farm business registrations and Single Farm Payments.

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