

# Materials and Methods

REFUGIA project working paper. By Tommy Dalgaard. Aarhus University. June 1, 2011.

## 1. Organic farming in Denmark

### 1.1 Farm types and farming structure

The organic farming structure has been analysed for all farms in Denmark 2005-2010.

Table 1. % of farm area 2005

Farm type	Organic	Conventional
Hobby	11%	15%
Cattle	41%	17%
Cash crops	32%	36%
Pigs and other types	17%	32%

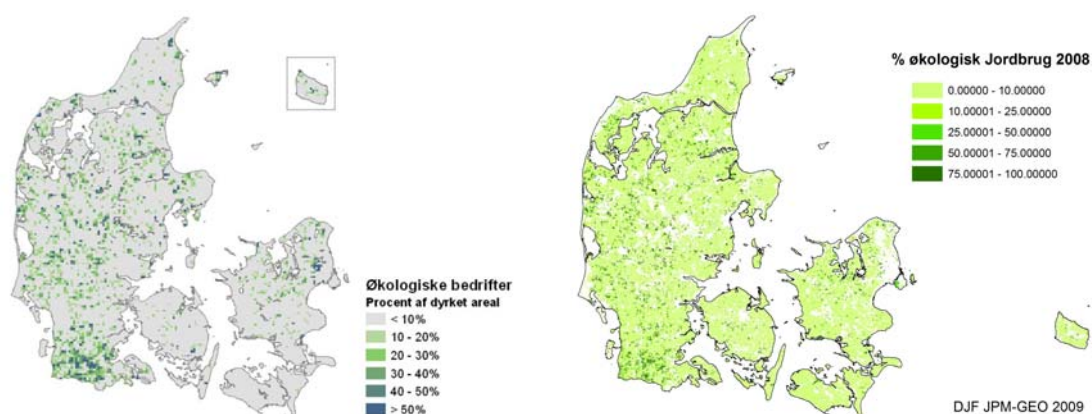


Figure 1: Distribution of organic farming in Denmark 2006 and 2008.

In 2005, the average farm size for organic farms was 50 ha, compared to 40 ha for conventional farms. For organic farms the largest average farm size is on sandy soils and for cattle farms, whereas for conventional farms, the largest farms are on loamy soils, and cash crop, and pig farms (table2)

Table 2. Avg. Farm Size 2005 (ha)

Farm type	Organic		Conventional	
	Loamy	sandy	Loamy	sandy
Hobby	19	20	18	17
Cattle	99	118	71	66
Cash crops	94	93	106	84
Pigs and other types	30	43	99	100

### 1.2 Cropping patterns, rotations and yield levels

The distribution on the different crop types handled by the ALMAsSS model, for the different farm types are shown in Table 3.

Table 3. The different crop types handled by the ALMAsSS model, for the different farm types

	Organic				Conventional			
	Hobby	Cash-crops	Cattle	Pigs etc.	Hobby	Cash-crops	Cattle	Pigs etc.
Carrots	0	1	0	0	1	7	0	1
CloverGrassGrazed1	0	0	0	0	0	1	0	0
CloverGrassGrazed2	5	9	28	8	41	31	116	30
DeciduousForest	0	0	0	0	0	1	0	1
FieldPeas	1	2	2	1	2	7	4	4
FodderBeet	0	0	0	0	4	31	6	11
Maize	0	1	4	0	8	17	87	18
MixedForest	0	1	0	0	3	3	0	1
N/A	0	0	0	0	1	1	0	0
NaturalGrass	0	0	0	0	2	3	1	1
Oats	2	4	3	2	8	15	3	22
Orchard	0	0	0	0	2	3	0	1
OutdoorPigs	0	0	0	0	0	0	0	1
PermanentGrass	0	0	0	0	3	4	0	1
PermanentGrassGrazed	1	4	3	2	45	35	31	23
PermanentGrassLowGrazed	1	5	2	1	24	19	5	11
PermanentSetaside	0	0	0	0	2	2	0	0
PotatoesEating	0	1	0	0	1	13	1	3
PotatoesIndustru	0	0	0	0	0	13	2	6
SeedGrass1	0	0	0	0	0	2	0	2
SeedGrass2	0	2	0	0	4	55	2	24
Setaside	0	1	0	0	21	75	31	58
SpringBarelyPeaCloverGrass	0	1	1	1	0	0	0	0
SpringBarley	2	4	4	3	98	209	64	183
SpringBarleyPeaCloverGrass	0	1	2	1	1	1	7	1
SpringBarleySilage	0	1	4	1	5	4	31	5
SpringRape	0	0	0	0	0	1	1	1
SpringWheat	1	2	1	1	1	3	0	2
Triticale	1	1	1	1	4	8	2	13
UndersownWinterWheat	0	0	0	0	0	0	0	0
WinterBarley	0	0	0	0	17	44	7	70
WinterRape	0	1	0	0	7	40	4	55
WinterRye	1	2	0	0	5	11	2	7
WinterWheat	0	1	1	1	67	275	33	284
YoungForest	0	0	0	0	9	14	1	3
Summed area	15	44	57	24	385	947	440	844
% of total farm area	1	2	2	1	14	34	16	31

The farms has been classified into farm types accoring to the EUROSTAT methods.. Hobby farms are defined with a number of standard working hours under 1871 timer/år (typically under 10-25 ha). These farms normally are not included in national statistics, but are important to include in the REFUGIA studies, because these farms are important for biodiversity and have a relatively higher number among organic farms. The other farm types are full time farms. If more than 2/3 of the standard gross margin comes from cattle it is a cattle farm, and the same for cash crops. The rest is

pig farms and other types of farms (for example poultry and fur animals). Standard rotations are defined for each of these farm types.

Tabel 4. REFUGIA farm type typologi. (Fire forskellige produktionstyper, samt intensiv og ekstensiv økologisk eller konventionel drift. Værdierne Ø1-Ø4 og K1-K4 refererer til forskellige hhv. økologiske og konventionelle standardsædskifter. ”+l” refererer til, at der regnes med en langsom afgrødevækstkurve og dermed et lavt udbyttensniveau, mens ”+h” refererer til hurtige afgrødevækstkurver og dermed højere udbytter).

Produktionstype	Økologisk		Konventionel	
	Ekstensiv	Intensiv	Ekstensiv	Intensiv
Hobby	Ø1+l	Ø1+h	K1+l	K1+h
Planteavl	Ø2+l	Ø2+h	K2+l	K2+h
Kvægbrug	Ø3+l	Ø3+h	K3+l	K3+h
Svinebrug	Ø4+l	Ø4+h	K4+l	K4+h

Tabel 5. Oversigt over de 2 x 4 standard-sædskifter i økologisk (Ø1-Ø4) og konventionelt jordbrug (K1-K4), og % areal med hver af de i Tabel 3 definerede ALMaSS typeafgrøder.

% areal med:	Økologisk				Konventionel			
	Hobby (Ø1)	Plante (Ø2)	Kvæg (Ø3)	Svin (Ø4)	Hobby (K1)	Plante (K2)	Kvæg (K3)	Svin (K4)
Carrots	0	10	0	0	0	0	0	0
CloverGrassGrazed2	30	20	50	20	10	0	20	0
FieldPeas	10	10	0	10	0	0	0	0
Maize	0	0	10	0	0	0	30	0
Oats	10	10	0	10	0	0	0	0
PermanentGrassGrazed	10	10	10	10	10	0	10	0
PermanentGrassLowGrazed	10	10	0	10	10	10	0	10
SeedGrass2	0	0	0	0	0	10	0	10
SpringBarley	10	10	10	10	30	30	10	30
SpringBarleyPeaCloverGrass	0	0	10	0	0	0	10	0
SpringBarleySilage	0	0	10	0	0	0	10	0
SpringWheat	10	10	0	10	0	0	0	0
WinterBarley	0	0	0	0	10	10	0	10
WinterRape	0	0	0	0	10	10	0	10
WinterRye	10	10	0	10	0	0	0	0
WinterWheat	0	0	0	0	20	30	10	30

Ø1	Vårbyg udlæg – kløvergræs – kløvergræs – kløvergræs – havre – ærter – vårhvede – vinterrug (+ 2 skifter varig græs)
Ø2	Vårbyg udlæg – kløvergræs – kløvergræs – gulerødder – ærter – vårhvede – havre – vinterrug (+ 2 skifter varig græs)
Ø3	Vårbyghelsæd udlæg – kløvergræs – kløvergræs – kløvergræs – vårbyg – vårbyg udlæg – kløvergræs – kløvergræs (+ 1 skifte varig majs og 1 skifte varig græs)
Ø4	Vårbyghelsæd udlæg – kløvergræs – kløvergræs – vårbyg – havre – ærter – vårhvede – vinterrug (+ 2 skifter varig græs)
K1	Vårbyg udlæg – kløvergræs – vinterhvede – vinterbyg – vinterraps – vinterhvede – vårbyg – vårbyg (+ 2 skifter varig græs)

K2	Vinterraps – vinterhvede – vårbyg udlæg – frøgræs – vårbyg – vinterhvede – vårbyg – vinterhvede – vinterbyg (+1 skifte varig græs)
K3	Vårbyghelsæd udlæg – kløvergræs – vårbyg – vinterhvede – vårbyg udlæg – kløvergræs (+ 3 skifter varig majs og 1 skifte varig græs)
K4	Vinterraps – vinterhvede – vårbyg udlæg – frøgræs – vårbyg – vinterhvede – vårbyg – vinterhvede – vinterbyg (+1 skifte varig græs)

The average yield levels for organic versus conventional farm types are indicated in Figure 2.

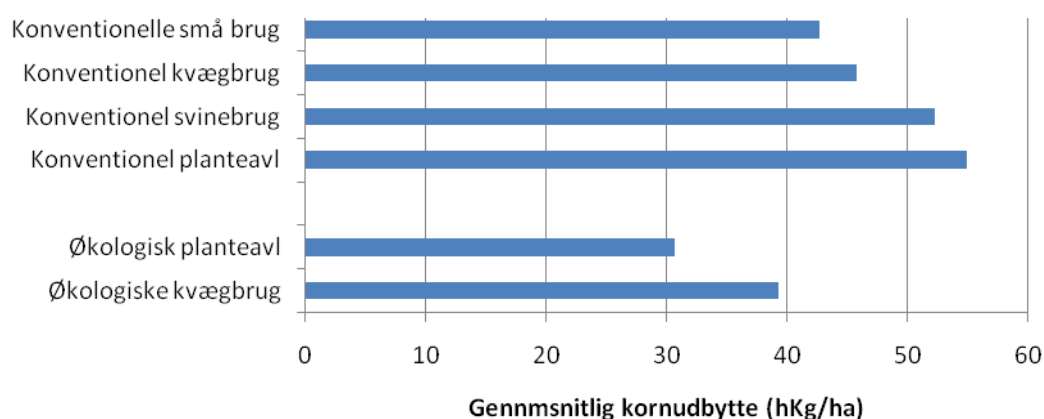


Figure 2. Det gennemsnitlige kornudbytte for forskellige økologiske og konventionelle produktionstyper de seneste 10 år ([www.foi.dk](http://www.foi.dk)).

### 1.3 Field sizes

The average field size is a bit smaller on organic compared to conventional farms, with the smallest average field size on the small hobby and cash-crop farms.

Table 6. Avg. Field size in 2005

	<i>Organic</i>	<i>Conventional</i>
Hobby	1,9	2,1
Cattle	4,1	3,6
Crop	4,0	4,4
Pig and others	2,8	4,6
All farms	3,6	3,7

Table 7. Avg field size in 2010:

	<i>Total area</i>	<i>Number of fields</i>	<i>Avg. Field size 2010</i>
Conventional	2543168	596559	4,3
Organic	170904	48288	3,5

### 1.3 Soil types

82% of all organic farms are on sandy soils; especially the cattle farms. This is primarily because most of the organic farms are situated in the Western Denmark.

Table 8. % of area on farms with predominantly sandy soils in 2005

<i>Farm type</i>	<i>Organic</i>	<i>Conventional</i>
Hobby	75%	66%
Cattle	90%	89%
Cash crops	76%	50%
Pigs and other types	79%	67%
Average, All farms	82%	64%

### 1.4 Conversion age of fields

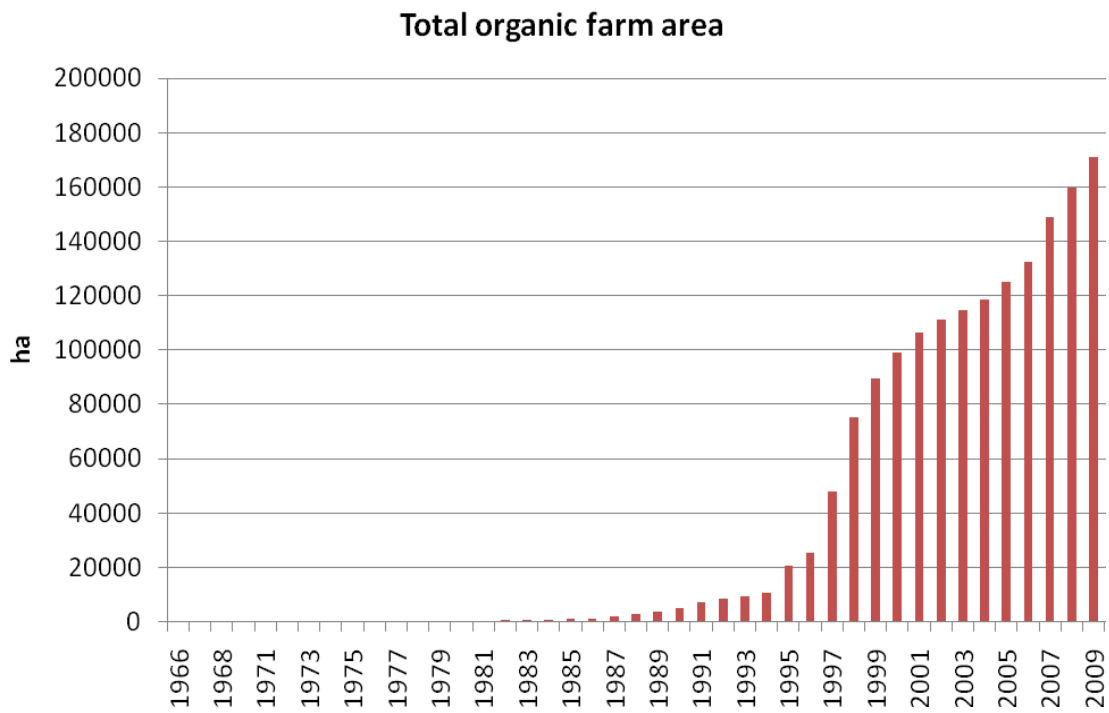


Figure 3. Year of conversion for the organically farmed fields in 2010.

## 2 The organic farms studied in the REFUGIA project

### 2.1 The case areas, farm types and farming/landscape structure

In addition to the national datasets above, we have digitized fields and landscape features in study areas around Bjerringbro/Fussingø and around Kalø/Tøjstrup in Mid Jutland, Denmark. The Kalø area is situated to the east, whereas the Bjerringbro and Fussingø study sites are situated to the west (Figure 4). All biotopes (12391 polygons) in the the 10 km \* 10 km square around Bjerringbro are digitized for the year 2005, including all 2961 fields on the in total 306 farms which have 1 or more fields within this defined square.

The average size of these fields digitized was 3.83 ha.

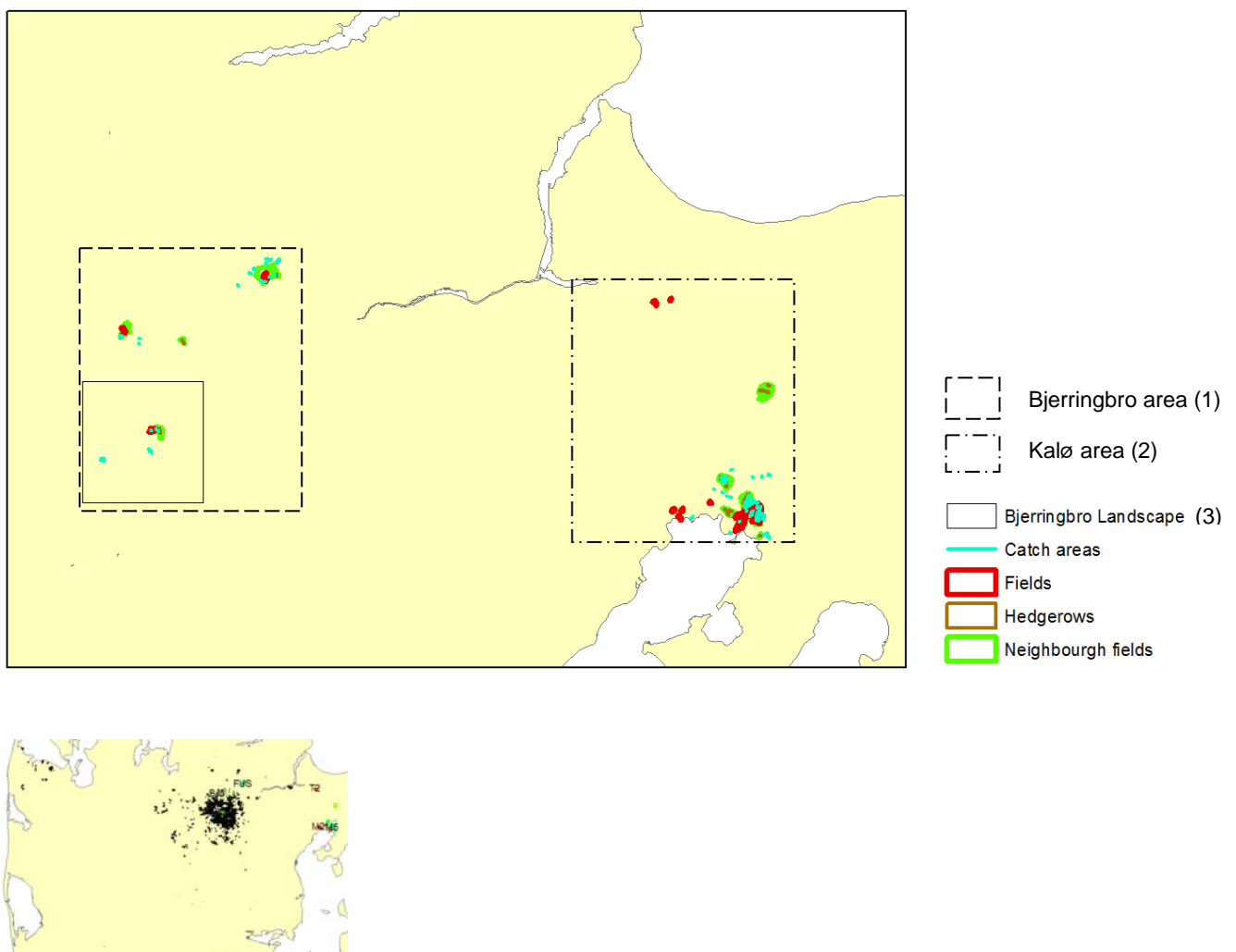


Figure 4. Digitized features in the 2 study areas in Mid Jutland. The Kalø/Tøjstrup area (2) is situated to the east, whereas the Bjerringbro and Fussingø study sites are situated to the west (1). All biotopes in the 10 km \* 10 km square around Bjerringbro (3) is digitized for the year 2005, including all fields on farms which have 1 or more fields within this defined square (lower left map).

## **2.2 Characteristics of the study areas in Bjerringbro and Kalø**

Each of the study areas, Bjerringbro and Kalø, contains both organic and conventional farms. The Bjerringbro area is the most agricultural intensive area, with around 66% of the area covered by agriculture, compared to a national average of 61%. In contrast the coverage with forests, hedgerows and other small biotopes is lower than the national average. In the Kalø area we have the opposite situation, with only 52% of the area in the form of agriculture, and with more forests and small biotopes than the national average. However, with about 7.6% of the agricultural land organically farmed, Kalø has more organic farming than the national average (5.6%), whereas the Bjerringbro area has a lower proportion of organically farmed areas (4.8%). In contrast the average fields size in Bjerringbro (3.3 ha) is smaller than the national average (3.6 ha for organic farms, and 3.7 ha for conventional farms), whereas the average fields size around Kalø is 3.9 ha. This is related to the farm types, where the Kalø area includes relatively many organic cash crop farms and hobby farmers, whereas both organic and conventional farming around Bjerringbro is dominated by livestock farming (mainly organic cattle farms, and both organic and conventional pig and cattle farms). There is no significant difference between the age of conversion of the fields in the two areas, where the most fields were converted between 1996 and 1999.

The soil type varies between the two areas. The soil at Bjerringbro is dominated by sandy and loamy sandy soils, whereas the Kalø area is dominated by loamy and heavy loamy soils

## **2.3 Scenarios for conversion to organic farming (see also chapter 1.2)**

In order to create the scenarios the current form of organic Danish farming was analyzed using a database of EU subsidy-support information (Happe et al. 2011; Dalgaard et al., 2002). Based on the official EU farm typology (McClintock 1989; Statistics Denmark 2010), the farms were classified into four types: ‘hobby’ (<1665 working hours/year), ‘cattle’ (>2/3rds of income from cattle), ‘arable’ (> 2/3rds income from cash crops), and ‘pigs and mixed farms’ (also including other types of specialised farms such as poultry & fur). All four types had organic and conventional variants each with specific mean area coverage for a range of crops (Table 1).

It was considered important to distinguish between extensive and intensive management. However, no clear pattern was detectable in crop choices between intensive and extensive variants, but based on Dalgaard et al. (2011, 2002) fertilizer usage was considered significantly different. Hence, the difference between intensive and extensive variants was limited to a 20% reduction in yield as a result of reduced fertilizer inputs, corresponding to the yield differences documented in official Organic farming statistics 1996-2010 (see for example Statistics Denmark 2010), and all permanent pasture was considered to be extensively grazed in extensive farm types. In ALMaSS, and the real world, there is an estimated 20% reduction in yield in organic crops compared to conventional crops of the same type due primarily to the use of organic fertilizer (Dalgaard et al., 2002). In addition, all model field management is organic, meaning no pesticides are used and mechanical weeding is replaces herbicide. This resulted in 16 farm types with differing crop selections, managements, and yields (see Table 4).

## **2.4 Collection of detailed farm data**

In addition to the general digitalization, detailed farm data from 18 farms (12 of these are organic) with a total farm area of 2655 ha have been collected for the years 2007 + (2006-2009)

Table 9. Area (ha) and the distribution on farm types for the 18 farms with detailed information collected (year 2007)

<i>Farm type</i>	<i>Organic</i>	<i>Conventional</i>
Hobby	76	0
Cattle	332	295
Cash crops	1066	339
Pigs and other types	0	548
Total	1474	1182

From these 18 farms we have specifically digitized 22 fields (with field studies), and 108 neighbouring fields (or areas with other land uses than arable crops), 29 hedgerows, and 15 catch areas for mice (including 119 transect lines).

## 2.5 Crop types, rotations and farming practices

Table 10. Crop rotation in the fields with detailed data collected

<i>Field ID</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
K4	triticale	vårbyg	vårbyg	vårhvede
K5	rødsvingel	vinteraps	vårbyg	vårbyg
K6	markært	havre	vårbyg	triticale
K3	vårbyg	markært	triticale	kløvergræs
K2	vårbyg	markært	triticale	triticale
K7	triticale	havre	vårbyg	vårbyg
T1	Kløvergræs	Vinterhvede	Vinterhvede	Vårbyg
T2	Kløvergræs	Vinterhvede	Vinterhvede	Vårbyg udlæg
T3	Kløvergræs	Vinterhvede	Vinterhvede	Vårbyg udlæg
M4	græs/kløver	Vinterhvede	triticale	triticale
M3	græs/kløver	Vinterhvede	triticale	tritic al grønkorn wrap + græs/kløver udlæg
M1	Vinterhvede	Vinterhvede	triticale	vinterbyg
M2	græs/kløver	Vinterhvede	triticale	vårbyg
FUS	markært	triticale	vårtriticale	havre
BJ2	Græs/kløver	vårbyg	Havre	Havre
BJ1	Græs/kløver	vårbyg	Havre	Havre
BJ8a	Græs/kløver	Vårbyg m. græsudlæg	Vårbyg grønkorn med græs efterslæt	Vårbyg udlæg
BJ8b	Græs/kløver	Vårbyg m. græsudlæg	Vårbyg grønkorn med græs efterslæt	Vårbyg udlæg
Karen	fodermajs	vårbyg	vårbyg	efterårsudlagt kløvergræs
M5	vårbyg	triticale	vårbyg	triticale
M6	triticale	vårbyg	vårbyg	vårhvede
M7	triticale	vårbyg	hestebønner	vårhvede



Table 11. Crop yields, field size and farming history in the fields with detailed data collected

<i>Marknavn</i>	<i>Udbytte (hKg/ha eller foderenheder grovfoder/ha)</i>	<i>Markstørrelse</i>	<i>Driftshistorie/bedriftstype</i>
K4	35	17,80	Økologisk planteavl
K5	35	20,00	Økologisk planteavl
K6	30	19,90	Økologisk planteavl
K3	40	20,10	Økologisk planteavl
K2	40	3,80	Økologisk planteavl
K7	30	22,60	Økologisk planteavl
T1	40	2,36	Økologisk malkekvæg
T2	50	4,26	Økologisk malkekvæg
T3	55	1,74	Økologisk malkekvæg
M4	50	2,76	Økologisk kødkvæg
M3	50	3,63	Økologisk kødkvæg
M1	50	1,54	Økologisk kødkvæg
M2	50	5,40	Økologisk kødkvæg
FUS	40	24,00	Økologisk planteavl
BJ2	35	6,44	Økologisk planteavl/fåreavl
BJ1	35	5,29	Økologisk planteavl/fåreavl
BJ8a	30 hkg + 3000 FE efterslæt	9,00	Økologisk malkekvæg
BJ8b	4500 FE incl. efterslæt	9,00	Økologisk malkekvæg
Karen	55	8,60	Økologisk malkekvæg
M5	40	30,10	Økologisk planteavl
M6	30	17,80	Økologisk planteavl
M7	30	14,50	Økologisk planteavl

Table 12. Crop management in the fields with detailed data collected

<i>Field ID</i>	<i>Afgrøde</i>	<i>Sort</i>	<i>Udlæg</i>	<i>efterafgrøde</i>
K4	Vårbyg	Power maltbyg	ja - kløver/rajgræs	ja - kløver/rajgræs
K5	Vårbyg	Power maltbyg	ja - kløver/rajgræs	ja - kløver/rajgræs
K6	Vårbyg	Power maltbyg	nej	nej
K3	Triticale Vintertriticale	Valentino	ja - kløver/rajgræs	ja - kløver/rajgræs
K2	Triticale Vintertriticale	Valentino	nej	nej
K7	Vårbyg	Power maltbyg	ja - kløver/rajgræs	ja - kløver/rajgræs
T1	Vinterhvede	Elvis	nej	nej
T2	Vinterhvede	Elvis	nej	nej
T3	Vinterhvede	Elvis	nej	nej
M4	Vinterhvede	Langstrået	nej	nej
M3	Vinterhvede	Langstrået	nej	nej
M1	Vinterhvede	Langstrået	nej	nej
M2	Vinterhvede	Langstrået	nej	nej
FUS	Triticale	Valentino	ja - kløver/rajgræs	ja - kløver/rajgræs
BJ2	Vårbyg	uvist	ja - kløver/rajgræs	ja - kløver/rajgræs
BJ1	Vårbyg	uvist	ja - kløver/rajgræs	ja - kløver/rajgræs
BJ8a	Vårbyg	uvist	ja - kløver/rajgræs	ja - kløver/rajgræs
BJ8b	Vårbyg, grønkorn	uvist	ja - kløver/rajgræs	ja - kløver/rajgræs
Karen	Vårbyg	Power	nej	nej
M5	Triticale	Valentino	ja - kløver/rajgræs	ja - kløver/rajgræs
M6	Vårbyg	Power maltbyg	ja - kløver/rajgræs	ja - kløver/rajgræs
M7	Vårbyg	Power maltbyg	ja - kløver/rajgræs	ja - kløver/rajgræs

Table 13. Management operations in the fields with detailed data collected.

<i>Marknavn</i>	<i>Pløjning</i>	<i>Såning</i>	<i>Høst</i>	<i>Strigling</i>	<i>striglingstids punkter</i>
K4	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr
K5	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr
K6	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr
K3	01-sep	05-sep	05-aug	1 x efterår blindstrigling	01-okt
K2	01-sep	05-sep	05-aug	1 x efterår blindstrigling	01-okt
K7	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr
T1	20-sep	25-sep	07-aug	nej	-
T2	20-sep	25-sep	07-aug	nej	-
T3	20-sep	25-sep	07-aug	nej	-
M4	19-sep	20-sep	01-sep	1 x efterår blindstrigling	30-sep
M3	19-sep	20-sep	01-sep	1 x efterår blindstrigling	30-sep
M1	19-sep	20-sep	01-sep	1 x efterår blindstrigling	30-sep
M2	19-sep	20-sep	01-sep	1 x efterår blindstrigling	30-sep
FUS	01-sep	05-sep	05-aug	1 x efterår blindstrigling	01-okt
BJ2	15-mar	01-apr	05-aug	2 x forår ukrudtharve	25/4 og 1/5
BJ1	15-mar	15-apr	07-aug	2 x forår ukrudtharve	25/4 og 1/5
BJ8a	01-mar	01-apr	15-aug	nej	-
BJ8b	01-mar	20-apr	20-jun	nej	-
Karen	15-jan	20-apr	01-sep	2 x forår blindstrigling	25/4 og 30/4
M5	01-sep	05-sep	05-aug	1 x efterår blindstrigling	01-okt
M6	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr
M7	01-apr	05-apr	15-aug	1 x forår blindstrigling	20-apr

Table 14. Fertilisation and irrigation in the fields with detailed data collected.

<i>Filed ID</i>	<i>Gødningstype</i>	<i>Vandings mængde</i>	<i>Vandingstids punkt</i>	<i>Gødskningsmængde (kg Plantetilgæng. N/ha)</i>	<i>Gødningstids punkt</i>
K4	Kvæg og svinegylle (konventionel)	0	-	42	01-maj
K5	Kvæg og svinegylle (konventionel)	0	-	42	01-maj
K6	Kvæg og svinegylle (konventionel)	0	-	42	01-maj
K3	Kvæg og svinegylle (konventionel)	0	-	56	20-apr
K2	Kvæg og svinegylle (konventionel)	0	-	56	20-apr
K7	Kvæg og svinegylle (konventionel)	0	-	42	01-maj
T1	Bioforgasset Svinegylle 12 t (konventionel)	0	-	38	20-apr
T2	Kvæggylle 37t (økologisk )	0	-	92	10-apr
T3	Bioforgasset Svinegylle 40 t (konventionel)	0	-	126	20-apr
M4	Minkgylle (konventionel)	0	-	120	20-apr
M3	Minkgylle (konventionel)	0	-	120	20-apr
M1	Minkgylle (konventionel)	0	-	120	20-apr
M2	Minkgylle (konventionel)	0	-	120	20-apr
FUS	Kvæg og svinegylle (konventionel)	0	-	56	20-apr
BJ2	Svinegylle (konventionel)	0	-	49	20-maj
BJ1	Svinegylle (konventionel)	0	-	49	20-maj
BJ8a	Dybstrøelse Jan-Feb. 20 t/ha før pløjning. 1-2 gange 12t/ha kvæggylle efter slet (økologisk)	0	-	100	15-jan
BJ8b	Dybstrøelse Jan-Feb. 20 t/ha før pløjning. 1-2 gange 12t/ha kvæggylle efter slet (økologisk)	2*30 mm	10/6 og 10/7	100	15-feb
Karen	kvæggylle 20-30t + Kvæg dybstrøelse 20-26t+ (økologisk)	2* 30mm	10/6 og 10/7	128	01-maj
M5	Kvæg og svinegylle (konventionel)	0	-	56	20-apr
M6	Kvæg og svinegylle (konventionel)	0	-	42	01-maj
M7	Kvæg og svinegylle (konventionel)	0	-	42	01-maj

## 2.6 Landscape structure

The following maps give an indication of the landscape structure around the fields, farms and landscape elements studied.

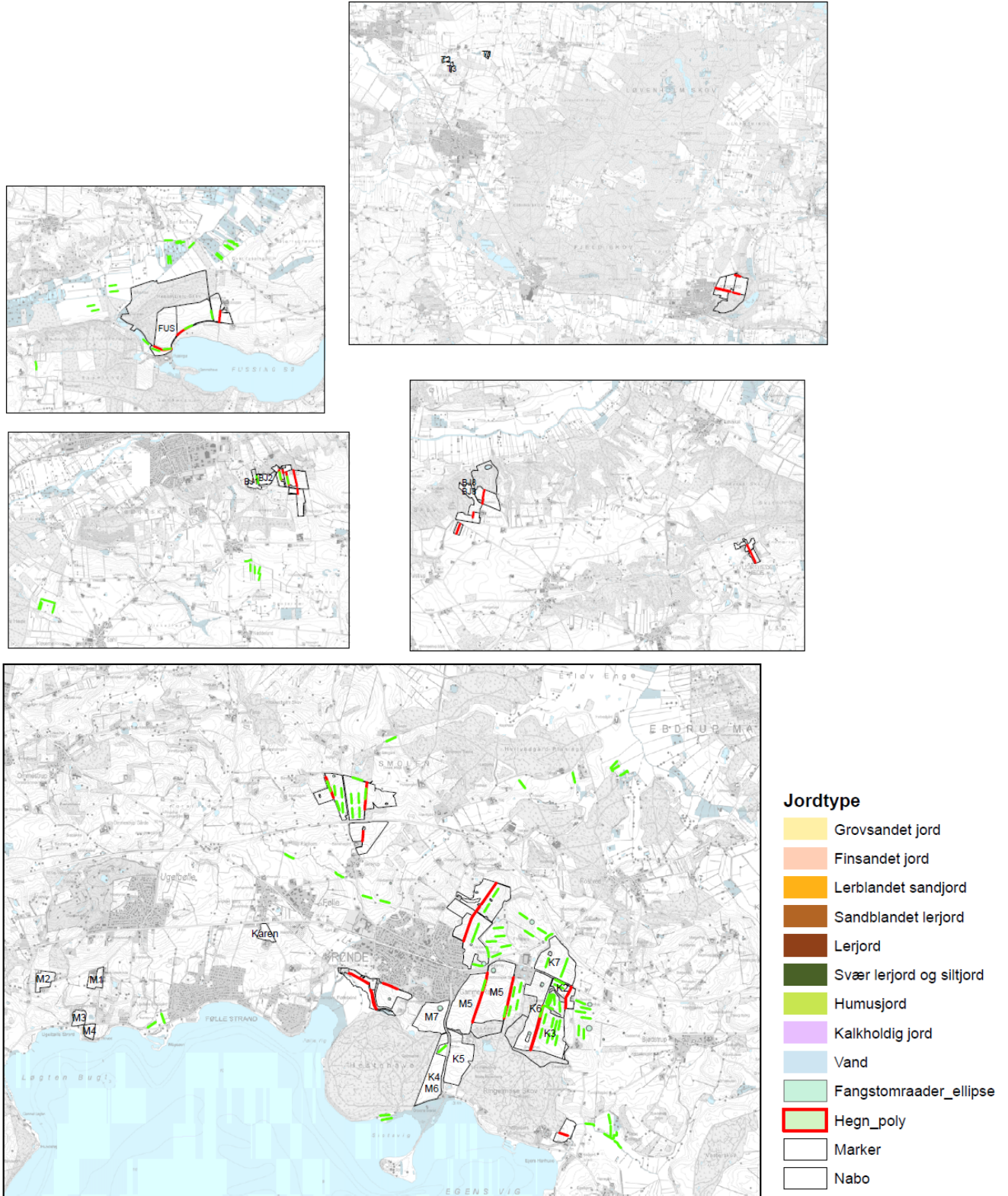


Figure 5. Landscape structure around the fields, farms and landscape elements studied.

## 2.6 Soil types

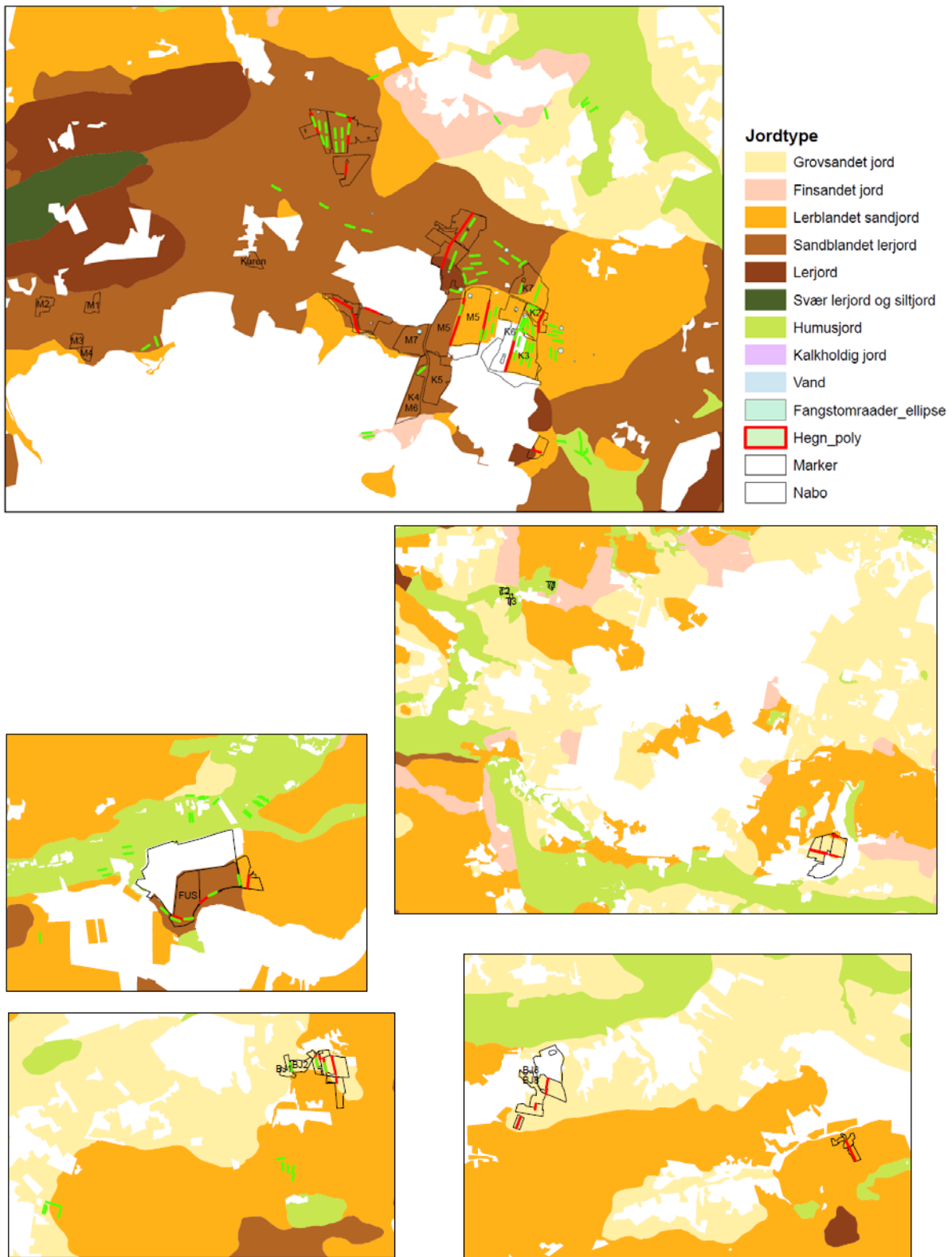


Figure 5. Soil types for the fields, farms and landscape elements studied.

In total 81% of the organic farms area are on sandy soil farms, compared to 41% of the conventional farms area studied. This is more or less the same pattern as we see for all farms in Denmark.

Table 15. The distribution of the area of the farms studied on sandy and loamy soils

<i>Farm type</i>	<i>Sandy</i>		<i>Loamy</i>	
	<i>Organic</i>	<i>Conventional</i>	<i>Organic</i>	<i>Conventional</i>
Hobby	6%	0%	0%	0%
Cattle	4%	0%	100%	42%
Cash crops	89%	15%	0%	38%
Pigs and other types	0%	85%	0%	20%

For the specific fields studied, there is a tendency towards more fields on sandy soils than the average in Denmark (Table 16).

Table 16. Soil types on the specific fields studied

<i>Marknavn</i>	<i>Markstørrelse</i>	<i>Jordtype</i>
K4	17,80	Sandblandet lerjord
K5	20,00	Sandblandet lerjord
K6	19,90	Lerblandet sandjord
K3	20,10	Lerblandet sandjord
K2	3,80	Lerblandet sandjord
K7	22,60	Sandblandet lerjord/Lerblandet sandjord
T1	2,36	Humusjord
T2	4,26	Humusjord
T3	1,74	Humusjord
M4	2,76	Sandblandet lerjord
M3	3,63	Sandblandet lerjord
M1	1,54	Sandblandet lerjord
M2	5,40	Sandblandet lerjord
FUS	24,00	Sandblandet lerjord
BJ2	6,44	Grovsandet jord
BJ1	5,29	Grovsandet jord
BJ8a	9,00	Grovsandet jord
BJ8b	9,00	Grovsandet jord
Karen	8,60	Sandblandet ler
M5	30,10	Sandblandet lerjord
M6	17,80	Sandblandet lerjord
M7	14,50	Sandblandet lerjord

## 2.7 Conversion age of fields

Of the 22 specific fields studied in 2007, 59% was converted in 1998, 27% in 1997, 9% in 1996, and 5 % in 2002. This is a typical pattern compared to the national pattern in Figure 3.

## 2.8 References

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