Sorting the Wheat from the Chaff

Developing the concept of the
Distributed National Collection
of agricultural heritage collections

Survey of Combine Harvesters

Part One - The Survey

1. The '*Sorting the Wheat from the Chaff*' Report gathered detailed data on the tractors held in the surveyed museums. This was the first object level data available for any type of agricultural material. At the Breaking New Ground Conference, this approach was welcomed and supported. One of the short-term goals identified was to complete a similar survey for Combine Harvesters. The Museum of English Rural Life identified a modest amount of additional funding for this, and a further development of the Collections Working Group concept. This work has now been done and the report on the results of the Combine Survey follows in this paper.

2. In the initial *SWfC* survey, nine of the selected museums indicated that they had combine harvesters in their collection. These nine museums were all sent a copy of an amended questionnaire, based on that used for the Tractor Survey, and aimed at gathering detailed information about those combines. (Appendix 1) In addition, a general request was circulated to all members of the Rural Museums Network for information on combine harvesters in museums. This elicited a further three responses, one from a Registered museum, and two from private collections.

3. Of the original nine, Hampshire replied to say that they no longer had any combines.

4. The Irish Agricultural Museum has two at their site but both are privately owned, so no details were sent. Austin O'Sullivan knows of no combines in museums in the Republic of Ireland.

5. The Yorkshire Museum of Farming has not returned the Questionnaire, but a follow-up phone call revealed uncertainty as to whether in fact there were any combines in the collection.

6. The museums included in this analysis, therefore, are, from the original list: Denny Abbey, Cambridgeshire; Norfolk Rural Life Museum; Museum of East

Anglian Life, Stowmarket; Museum of Lincolnshire Life, Lincoln; Museum of Scottish Country Life, Kittochside; Science Museum, London and Wroughton.

7. The additional museums are: Greenfield Valley, Flintshire; and the unregistered Braemore Countryside Collection and Oldown Country Park, Tockington, Bristol.

8. The resultant list is a total of 31 machines. Of the 31, 13 are at the Museum of Scottish Country Life, Kittochside. Of whose machines all but one score over 20 in the assessment. Only two other machines, one from Lincolnshire and one from Denny Abbey, scored over 20. The Lincolnshire Marshall came out top with 24 points, a score enhanced by its local and unusual manufacturer. However, this assessment of significance was altered substantially at the Combine Seminar, when they were assessed in a national historical context.

9. The Kittochside combines scored highly for their good storage and condition. Others fared less well under these important criteria, with no less than seven machines scoring only 1 for condition. This includes all the International Harvesters at Gressenhall, although these have an important provenance, having all been used by the same farmer, and one of which saw assessed at the Seminar as being of majot importance.

10. Only one combine scores 4 for significance as a rare survivor – the Jones machine at Greenfield Valley. However, the Seminar agreed that both the Marshall at Lincoln and the Clayton and Shuttleworth at Kittochside should score 4 for significance on the same basis,as the only known survivors of their type. The independent seminar proved how important it is have the informed view of specialists when considering these and other issues.

11. The complete list is attached as a Database file at Appendix 2.

12. What this analysis does not tell us is how representative this sample of 31 machines is in terms of telling the story of the development of combine harvesters in the UK; nor how significant the individual machines are in technological or historical terms. The Combine Seminar provided that information, as explained in Part Two.

Part Two – the Seminar

1. The first pilot Collections Working Group Seminar was held at Museum of Scottish Country Life, by kind invitation of the Scottish Country Life Museums Trust, on 15.07.04. The purpose of the seminar was to consider the history of Combine Harvesters in the UK. What follows is a summary of the meeting, with a report on the effectiveness of the methodology used, and lessons learned.

2. The participants were:

Ian Fleming, East Kilbride, a gentleman with a long lifetime's experience of the agricultural machinery industry, and a particular knowledge of combine harvesters.
Ron Knight, Gt Casterton, Rutland, a practising farmer and skilled agricultural engineer with a private collection of 20 combine harvesters, all but three of which are restored to working order.
Dr. Andrew Sewell, whose PhD theses was on the subject of combine harvesters, and who now runs a business called 'Classic-Combines'
Jane Insley, Senior Curator – Engineering Technology, Science Museum
Gavin Sprott, recently retired Keeper of Social and Technological History, National Museums of Scotland and, with Ian Fleming, the inspiration behind the fine collection of combines at Kittochside.
Duncan Dornan, General Manager, Museum of Scottish Country Life, and member of the Steering Group of the Rural Museums Network
Elaine Edwards, Curator, Museum of Scottish Country Life
Catherine Wilson, consultant and member of the Steering Group, Rural Museum Network (note-taker for the meeting)

The participants had been selected for their detailed knowledge of the history and engineering of combine harvesters in the UK.

3. An Agenda, detailing the purpose of the meeting, and listing 'Heads for discussion' was circulated at the start of the meeting.(Appendix 3) This was important to give some structure to the meeting, but it should have been circulated in advance to give participants time to consider it. Some time was wasted at the start of the meeting in a discussion which could have been avoided had the appropriate reference books been to hand, or if the participants had been able to check dates etc. before the meeting.

4. Duncan Dornan chaired the meeting very effectively. This is essential to ensure that the discussion remains focussed. Even so, inevitably, the discussion strayed wider than the brief, particularly in consideration of developments in the USA and elsewhere in Europe. This was interesting and raised the question of how far developments in the UK should be put in a wider international context in

these discussions. However, the conclusion of those present was that, at least for this initial stage, we needed to concentrate on the UK.

5. Gavin Sprott made a significant contribution, being able to put the technological developments into the context of historical and political events. This dimension is essential to a consideration of how the artefacts can reflect these wider events, and how their introduction affected the lives of the people who used them.

6. Good progress was made with considering landmark developments pre-1939 and during the War. The situation became more complex in the 1950s as more, smaller manufacturers came on the scene. There was some discussion about rarity as a factor in significance. The consensus was that the only known survivor of a particular manufacturer was important even if there were no technological advances, though there was no particular merit, from a national stand-point, of striving to collect an example of every small manufacturer. However, significance was enhanced if the item was preserved within the area where it was made or it had particular local connections. Local collecting policies may, of course, have different priorities. But the fact that a machine is the last of its type, or a rare survivor, is not, on its own, enough to justify a place in a Distributed National Collection. Common makes that had a widespread impact were just as, if not more, important.

7. During the 1960s and 70s there were few real technological developments in combines, whilst other factors became significant in the story. Plant breeding became very important and the need to process new crop varieties, with heavier heads and shorter straw, drove developments in the machinery. Grain drying also became increasingly important. Another major development was the increasing size and reliability of the power source on the combine – the machinery could get bigger, but the technology remained broadly the same. It became increasingly difficult to identify particular machines that were significant. In fact we did not really deal in depth with the post-1970 period.

8. The list of combines already in museums was considered to see how well they represented the 'landmarks' identified. On the whole, the match was quite good, with no major gaps identified. Of the 31 combines, 25 were considered to be worthy of forming the Distributed National Collection. These were given a 'star rating', which resulted in one having 4 stars, three having 3 stars, six having two stars, and the rest with one star. These ratings are shown as Appendix 3, which also shows a comparison with the original 'scores'. From this it is clear that the assessment of significance of individual machines varied considerably from the 'scores' allocated by the curators. In particular, one item in poor condition, which scored only 17 in the assessment, was identified as among the top 4 machines in the country. It was pointed out that such factors as condition could change if

resources were made available and if the object were sufficiently important. It may be that the criteria for assessment should be changed in the light of this experience. But the process demonstrated conclusively the real benefit of having the input of those with detailed knowledge and expertise into the DNC process.

9. The discussion lasted from 9.30 to 2.30, with a break for lunch. The 2.30 finish was determined by 3 members having to catch trains back south. The discussion could usefully have gone on for a further hour. In particular, there was not the opportunity to discuss items in private ownership that would add to the story and were of real significance. However, it is felt that a day's focussed discussion should be adequate to get to the heart of any topic, and is as long as people can be expected to concentrate.

10. Cost of the Seminar:
DD, EE and CW between them made arrangements for the Seminar, contacting participants and compiling the Agenda. If done by one person, at least a day should be allowed for this, more if there are more participants
The meeting room and lunch were generously provided by the Museum of Scottish Country Life.
MSCL also in this case most generously covered the cost of travel and accommodation for the three participants from the south. The cost of this and the lunch was £350 but a further £200 should be added to cover room hire and staff time, to arrive at the actual cost of the Seminar. This assumes that all participants are prepared to give their time voluntarily and do not require fees.
CW made a minidisc recording of the proceedings, took notes, and has the task of writing up the results and producing a report. This is not a quick process and may take 2 days or more, for which no funding is allocated. Ideally, this process should be done by an administrator working for the RNM to ensure consistency of approach, proper management of the database and effective communication with all involved. At least a further £500 should be allowed for administrative time, making the real cost of the Seminar in the region of £1000.

11. Recommendations for future seminars

1. An agenda should be produced and circulated in advance of the meeting
2. Relevant reference books should be to hand to resolve uncertainties about dates, etc.
3. A good chairman is essential to keep the discussion focussed
4. It is important to have at least one participant with a deep knowledge of the broader historical context, as well as those with a technological expertise. This may be an academic, an agricultural historian (perhaps the help of the British Agricultural History Society could be enlisted), or an experienced curator

5. Rarity is not necessarily on its own an indication of significance, though is clearly a factor to be borne in mind.
6. The Questionnaire approach to data-gathering does work, but there does need to be a telephone follow-up process in order to get as near 100% response as possible. One return only arrived the day before the seminar, but it was important to have that contribution.
7. The present scoring system undertaken by curators will not, on its own, deliver a 'robust' DNC.
8. The input of specialist expertise is vital to the process
9. Even so, the scoring system needs review to see if it can be developed to provide more guidance to those completing the Questionnaire
10. One normal working day of focussed discussion should be long enough to achieve the desired outcome
11. Each seminar should have no more than 10 participants
12. There really does need to be some dedicated administrative time, particularly to write up the results of the seminars, to co-ordinate the process, and to ensure the completeness of the database.
13. If the process is to make progress some dedicated funding does need to be secured.

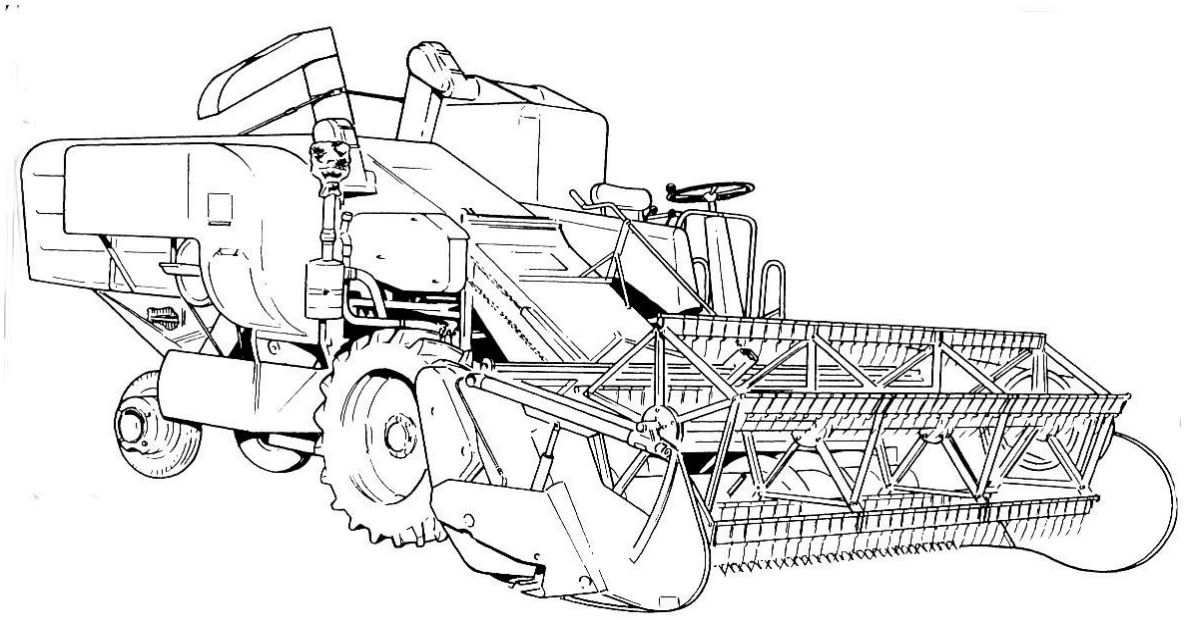
12. Conclusion

Following the work done on the Combine Questionnaire and the Combine Seminar, it can be stated with some confidence that the first plank of the Rural Museums DNC is in place. 24 combine harvesters spread through 7 different institutions can claim to form 'the distributed national collection' in that subject area. Two of the seven are national museums but five are regional museums without Designated collections.

This is a very small step towards the ultimate goal, but the process has proved that the methodology can work; that non-museum people are very willing to be involved in the process; that most museums will respond to simple limited scope questionnaires; that there is much goodwill in the sector and a wish to see this process continue.

Appendix 1 – The Questionnaire

SURVEY OF COMBINE HARVESTERS



Massey Ferguson 788 combine

from ‘An Illustrated History of Combine Harvesters’ by Jim Wilkie

Collection details

For each combine harvester, please complete the following Range Statements on the chart below

Display and storage

1 Not on display, stored outside
2 Not on display, stored with some cover (open-sided shed, well sheeted)
3 Not on display, stored undercover in fair – good conditions
4 On display, but outside
5 On display, inside
6 On display, inside, in working order

Documentation

1 No allocated number, not formally accessioned
2 Basic documentation/list only
3 Detailed documentation
4 Detailed documentation and computerised entry

Condition

1 Unrestored, poor condition or incomplete
2 Restored externally, not in working order
3 Fully restored but with little 'original' remaining
4 Fully restored to accepted conservation standards
5 In original condition but not working
6 In original condition and working order

Provenance

1 No known history
2 Basic provenance
3 Known history of use
4 Fully associated with person & place

Manufacture

1 Not made or used locally
2 Maker outside collection area, but supplied or used locally
3 Maker within collection area
4 Maker and supplier/user within collection area

Significance

1 Item illustrates type of activity that merits preservation
2 Item relates to an activity locally important/typical of the region
3 Represents an important technical or operational aspect of agriculture

4 Is known to be rare/only survivor of type

Combine harvester survey

Museum Name and location ……

……
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MDA Code ……

Recording date	Accession Number	Accession Number
Make		
Type		
Date of construction		
Display & store (score 1-6		
Documentation (score 1-4)		
Condition (score 1-6)		
Provenance (score 1-4)		
Manufacture (score 1-4)		
Significance (score 1-4)		
Total score		
Comments		

Please photocopy extra sheets if necessary

Recording date	Accession Number	Accession Number
Make		
Type		
Date of construction		
Display & store (score 1-6		
Documentation (score 1-4)		
Condition (score 1-6)		
Provenance (score 1-4)		
Manufacture (score 1-4)		
Significance (score 1-4)		
Total score		
Comments		

Please return this Questionnaire to:

Catherine Wilson, Penates, 5 Station Road,
Reepham, Lincoln, LN3 4DN
Tel:01522 753648; e-mail: catherine@penates.demon.co.uk

by 3rd May, 2004

Appendix 2 – The database

1 Combine Survey														
ID	Name of Museum	MDA code	Acc No	Make	Model	Date	Field1	Display	Doc	Cond	Prov	Manf	Sig	Total
1	Norfolk	GRSRM	1981.170.1	International Harvester Co	No 20	1930-35	*	3	4	1	4	2	3	17
2	Norfolk	GRSRM	1981.170.2	International Harvester Co	No 8	1926-35	***	3	4	1	4	2	3	17
3	Norfolk	GRSRM	1981.170.3	International Harvester Co	No 22	1935-45	*	3	4	1	4	2	3	17
4	Norfolk	GRSRM	1981.170.4	International Harvester Co	No 21	1932-7	*	3	4	1	4	2	3	17
5	Grnfield Valley	FLIMS	1993.03	Jones		1951	**	4	2	2	1	3	4	16
6	Grnfield Valley	FLIMS	1982.79	Ransomes	MST42	1950s early		3	2	1	2	2		10
7	Denny Abbey	DNNFM	2003.141	Massey Ferguson	735	1950's	*	2	4	5	4	2	3	20
8	Stowmarket	STMEA	1984.1	Massey Harris	222/8	1947c.	*	4	3	2	4	2	3	18
9	Lincolnshire	LCNLL	78.923	Marshall	626	1952c.	**	5	3	5	4	4	3	24
10	Lincolnshire	LCNLL	95.475	Massey Harris		1960s		3	3	1	4	4	3	18
11	Science Mus		1964.72	Massey Ferguson	780	1954	*	5	3	3	4	1	3	19
12	Science Mus		1980.1926	John Deere	36	1939 pre-	***	3	4	1	3	2	3	16
13	Science Mus		1980.1927	International	41T	1934 c.	*	3	4	1	3	2	3	16
14	Science Mus		1984.1148	Allis Chalmers All Crop	60	1938 c.	*	3	4	5	3	2	3	20
15	Kittochside		W.1999.20	Massey Harris	21	1941	**	6	4	4	2	2	2	20
16	Kittochside		W.1994.94	Claas	MDB	1937	**	6	4	4	4	2	2	22
17	Kittochside		W.1997.32	Holt Caterpiller	38	1928	***	6	4	4	4	1	3	22
18	Kittochside		W.1999.200	Clayton Shuttleworth		1928	****	6	4	4	4	2	3	23

1 Combine Survey														
ID	Name of Museum	MDA code	Acc No	Make	Model	Date	Field1	Display	Doc	Cond	Prov	Manf	Sig	Total
19	Kittochside		W.1999.21	Massey Harris	726			6	3	3	2	1	3	20
20	Kittochside		W.1995.5	Massey Ferguson	735	1950	*	6	4	4	2	4	2	22
21	Kittochside		W.1986.175	Massey Ferguson	780 special	1950s		3	4	1	1	4	2	15
22	Kittochside		W.1974.129	Allis Chalmers All Crop		1953	*	6	4	4	4	2	2	22
23	Kittochside		W.1996.10	Claas	Columbus	1966		6	4	4	4	2	2	22
24	Kittochside		W.1996.38	JF Wrap around		1960s	*	6	4	6	2	2	2	22
25	Kittochside		W.1996.37	Claas Super Tank	50	1950s	*	6	4	4	3	2	2	21
26	Kittochside		W.1996.39	Aktiv			*	6	4	4	2	2	2	20
27	Kittochside		W.2000.104	Fisher Humphries Lely		1976	**	6	4	6	2	2	2	22
28	Braemore			Allis Chalmers		1940s		5	1	2	4	2	3	17
29	Stowmarket	STMEA		Claas Super Automatic		1962	*	1	1	6	2	2	4	16
30	Science Museum			Massey Harris	21	1947	**	3	4	5	3	2	3	20
31	Science Museum		1979.558	Ransomes Sims & Jeffries		1954		3	2	2	2	2	3	14
32	Oldown Country Park, Bristol			Massey Ferguson	780			1	1	1	1	2	1	7

Appendix 3 – Agenda for the Combine Seminar

The Distributed National Collection of agricultural heritage collections

Combine Harvesters – a pilot study
Meeting to be held at the Museum of Scottish Country Life, Kittochside, 15.07.04

Purpose:
To consider the social and technological impact of the combine harvester on agricultural life in the UK during the 20th century
To identify individual makes and models of machine that could best illustrate that impact
To consider existing holdings of combines in museums and identify those worthy of forming part of the Distributed National Collection

Heads for discussion

1. Background to the meeting – the concept of the Distributed National Collection

2. What are the landmarks in the development of combines?

3. What makes/types best illustrate those landmarks?

4. Are there regional differences to the story?

5. What was the social impact of the combine a) on the farmer, b) on the rural community, c) on the wider public?

6. What makes/types, or other artefacts would best illustrate that social impact

7. Which machines already in UK museums could represent the technological landmarks and the social impact?

8. How significant is rarity as a factor to be considered?

9. Are the combines already in museums of sufficient quality to be considered part of the Distributed National Collection?

10. Where are the gaps, and how might they be filled?

Appendix 4 – 'Star ratings' for combines compared with 'scores'

Name of Museum	MDA	Acc No	Make	Model	Date	Field	Total
Kittochside		W.1999.200	Clayton Shuttleworth		1928	****	23
Norfolk	GRSRM	1981.170.2	International Harvester	No 8	1926-35	***	17
Science Mus		1980.1926	John Deere	36	1939	***	16
Kittochside		W.1997.32	Holt Caterpiller	38	1928	***	22
Grnfield Valley	FLIMS	1993.03	Jones		1951	**	16
Kittochside		W.2000.104	Fisher Humphries Lely		1976	**	22
Science Museum			Massey Harris	21	1947	**	20
Kittochside		W.1999.20	Massey Harris	21	1941	**	20
Kittochside		W.1994.94	Claas	MDB	1937	**	22
Lincolnshire	LCNLL	78.923	Marshall	626	1952c.	**	24
Stowmarket	STMEA	1984.1	Massey Harris	222/8	1947c.	*	18
Norfolk	GRSRM	1981.170.4	International Harvester	No 21	1932-7	*	17
Norfolk	GRSRM	1981.170.3	International Harvester	No 22	1935-45	*	17
Norfolk	GRSRM	1981.170.1	International Harvester	No 20	1930-35	*	17
Stowmarket	STMEA		Claas Super Automatic		1962	*	16
Denny Abbey	DNNFM	2003.141	Massey Ferguson	735	1950's	*	20
Kittochside		W.1995.5	Massey Ferguson	735	1950	*	22
Kittochside		W.1996.39	Aktiv			*	20
Kittochside		W.1996.37	Claas Super Tank	50	1950s	*	21
Kittochside		W.1996.38	JF Wrap around		1960s	*	22
Science Mus		1964.72	Massey Ferguson	780	1954	*	19
Kittochside		W.1974.129	Allis Chalmers All Crop		1953	*	22
Science Mus		1980.1927	International	41T	1934 c.	*	16
Science Mus		1984.1148	Allis Chalmers All Crop	60	1938 c.	*	20
Grnfield Valley	FLIMS	1982.79	Ransomes	MST42	1950s		10
Kittochside		W.1999.21	Massey Harris	726			20
Kittochside		W.1996.10	Claas	Columbus	1966		22
Braemore			Allis Chalmers		1940s		17
Science Museum		1979.558	Ransomes Sims &		1954		14
Lincolnshire	LCNLL	95.475	Massey Harris		1960s		18
Oldown Country Park,			Massey Ferguson	780			7
Kittochside		W.1986.175	Massey Ferguson	780 special	1950s		15