FIFTH MEETING OF THE PESTICIDES FORUM, 8 OCTOBER 1997
AT THE DEPARTMENT OF THE ENVIRONMENT, 2 MARSHAM STREET, LONDON

1. Those present

1.1 Those attending are listed at Annex A.

2. Introductions

2.1 The Chairman welcomed members to the fifth meeting of the Forum, particularly those attending for the first time - David Barnett (CLA replacing Anthony Pemberton) and Professor Paul Miller (AEA deputising for Ron Saunders). Dr Anne Buckenham (BAA) had taken over from Tony Pike. There were apologies from Barrie Orme (BASIS), Lynn Griffiths (WOAD) and Brian Murphy (DANI). Alex Mason (PSD) replaced Matthew Wells and Jane Hartshorne (DTi) replaced Ian Lawrence. Dudley Coates (MAFF) attended in the afternoon.

2.2 The Chairman announced that this was Andy Croxford's last meeting as joint secretary before taking up a new job with the Environment Agency, and, on behalf of the Forum, thanked him for his hard work.

2.3 The Chairman noted that the Action Plan was launched on 14 August along with an associated press release that included comments from three Ministers (Agriculture, Environment and Health).

2.4 The Chairman thanked all who provided details of information and initiatives on best practice that have been used in producing papers PF/31 and PF/39 for the meeting.

3. Minutes of the Fourth Meeting (PF/min/4) and Matters Arising

3.1 Andy Croxford reported on the Actions arising from the last meeting. These had all been cleared or were to be covered at the meeting except Action 8 where PSD indicated that offers of help to promote and distribute the revised Green Code would be taken on board when it is published in early 1998.
4. Reports from Organisations / Forward Look: Members' activities
February - June 1997

4.1 The Chairman reported on progress with the Food Standards Agency. There will be a consultative White Paper published in the autumn and legislation is likely in the next parliamentary session.

4.2 An update of BAA's activities was tabled and is given at Annex C.

4.3 The NFU/Retailer fresh produce assurance scheme now includes Tesco and has appointed a permanent secretariat. It opened to producers on 1 October and the first independent verifications will be undertaken by Checkmate International after Christmas. An independent verifier has now been agreed for the combinable crops assurance scheme and over 2500 information sets have been sent out.

4.4 LEAF membership is rising by 50-70 per month and an increasing number of suppliers are asking their producers to undertake a LEAF audit. The LEAF audit is to be computerised and will have an eco-rating system attached to it. The first BASIS/LEAF ICM course has been held.

4.5 The Game Conservancy Trust is to hold conservation meetings for around 1000 farmers and has applied for funding from DETR's Environmental Action Fund.

4.6 FWAG are to hold a Sainsbury-sponsored biodiversity conference at the NEC, Birmingham.

4.7 Member companies of UKASTA are holding meetings and conferences to train staff and many are providing their staff with the TIBRE handbook. UKASTA supports the BASIS/LEAF ICM course.

4.8 ADAS are to publish a book "Progressive Arable Business".

4.9 It was agreed that the work of the Forum merited greater publicity and members and the secretariat should seek appropriate opportunities.

ACTION: MEMBERS AND SECRETARIAT
5. **Indicators of risk to the environment from pesticides**

5.1 **Tim Davis** presented an overview paper (PF/29) that summarised the different types of indicators that can be used to show whether things are getting better or worse for the environment. The paper proposed a suite of possible indicators.

5.2 Dr Fraser Quin of SAC presented his PSD-funded work on pesticide risk indicators (PF/30). SAC are reviewing the range of computer models that have been developed to quantify pesticide impact on the environment. They are looking at the strengths and weaknesses of different models and will select the most promising to test with pesticide use data.

5.3 Members concluded that two types of indicators should be investigated further: those that provided farmers with information about the environmental impact of pesticides and those that indicated whether or not policy was improving the impact of pesticides. It was generally felt that a single figure of risk was not appropriate as this could mask high risks in some areas and that several figures pertaining to different types of risk were required. For informing farmers, it was agreed that a simple "traffic light" system of risk to different elements of the environment for individual pesticides would be helpful. Data from the registration process could be used to develop potential indicators and indicators need to be tested under actual field conditions. It was also noted that efficacy and cost of pesticides need to be taken into account.

5.4 **Peter Beaumont** outlined the work that the Pesticides Trust and FWAG are undertaking to provide summaries of environmental information on pesticides to farmers in a consistent and readable form. The summaries are being trialed with farmers this autumn and will be presented to the Forum.

**ACTION: PESTICIDES TRUST/FWAG**

5.5 **Nick Sotherton** was concerned that surveys of non-target indicator species were not included in the proposed suite of indicators and offered to provide a paper on how these could be undertaken.

**ACTION: NICK SOTHERTON**

5.6 Members were asked to provide additional written comments on pesticide indicators to the secretariat so that a paper could be produced summarising the Forum's views and the way forward.

**ACTION: MEMBERS**

5.7 PSD will circulate to members the final report of the SAC project due at the end of the financial year.

**ACTION: PSD**
6. **Presentation by RPA/Entec on the private costs and benefits of pesticide minimisation**

6.1 Lesley Moore and Anthony Footitt of Risk and Policy Analysts presented their work with Entec on the costs and financial benefits to farmers from adopting different integrated farming techniques to reduce the environmental risk from pesticides. Paul Reaston of Entec was also present. The study considered individual techniques, three case study farms and the potential costs and savings on a national scale. The work concluded that while some techniques such as delayed sowing and replacing winter crops with spring crops were costly to the farmer, other techniques such as using disease resistant varieties, appropriate pesticide dose rates and pest thresholds for spray decisions led to large savings for the farmer. It was suggested that those financially beneficial techniques with fairly universal application could form the core of a pesticide minimisation strategy while other site-dependent techniques could be employed depending on individual circumstances. Financially beneficial techniques could offset the costs of other techniques.

6.2 The Forum thought the work used an interesting approach. However, some felt that the agricultural understanding was inadequate and some of the figures were challenged. There was also concern that the work duplicated some of that undertaken by Scottish Natural Heritage in its TIBRE programme. Despite these reservations, the Forum agreed with the work's overall conclusions (these were broadly in line with those from the TIBRE work) and it was acknowledged that the Forum needed to know which techniques will be driven by economic forces and which will need outside support. Members were asked to send any further comments on the work to the Secretariat to be passed on to RPA/Entec.

**ACTION: MEMBERS**

7. **Objectives and measures**

Matrix, column on initiatives (PF/31)

7.1 Andy Croxford presented a revised principles and practices matrix with a new column indicating relevant on-going initiatives. Paper PF/31 identified a number of principles/practices where there did not appear to be much activity.

7.2 Members indicated other activities that should be included in the matrix. It was pointed out that the need to manage pesticide resistance might conflict with pesticide minimisation activities. Recording efficacy of products was subjective and could be difficult to do accurately. There was concern that phasing out older technology could include isoproturon. The secretariat offered to circulate to the Forum a summary of PUSG results on IPU.**ACTION: SECRETARIAT**
7.3 There was some concern over the number of surveys the matrix indicated needed to be undertaken. However, it was felt that these did not all need to be done at the same time and that some were already in hand. The secretariat were asked to consider existing surveys to establish whether there are important information gaps.

ACTION: SECRETARIAT

7.4 Paul Miller offered to provide information on the sales of sprayer machinery and their environmental features

ACTION: PAUL MILLER

Example Standard Operating Procedure - (PF/32)

7.5 Jim Orson presented an example standard operating procedure on decontaminating field sprayers. This set out the major issues for the farmer and allowed him to identify who was responsible for specific actions.

7.6 The proposed system was recognised as a way of simplifying existing advice such as that provided in the Green Code and several members pointed out areas where similar initiatives had been successful. However, there was concern about increasing the amount of paperwork for farmers.

7.7 The secretariat offered to explore the possibility of producing a small number of standard operating procedure cards.

ACTION: SECRETARIAT

8. Report from the technology transfer sub-group (PF/33)

8.1 John Sherlock presented the report of the technology transfer sub-group. The sub-group had met three times and consulted over 100 individuals in putting together its report on how to improve technology transfer. The report concluded that farmers will only adopt techniques if they are cost-effective, that technology transfer costs money and that face-to-face contact is probably the most effective method. The secretariat will draw the attention of major funders and research organisations to the report.

ACTION: SECRETARIAT

The report made 11 recommendations:

Recommendations A - C
Recommendation A was to more fully integrate research and technology transfer. Recommendation B was for research organisations to employ and train technology transfer experts. Recommendation C was to make
messages clear, simple, consistent and targeted. The Forum agreed with these recommendations.

Recommendation D
Recommendation D was for agricultural engineers, pesticide manufacturers and regulators to work closely together on pesticide application technology. This was agreed by the Forum. It was recognised that improving uptake of new pesticide application machinery was difficult because of the capital cost. The AEA and the BAA have an on-going dialogue in this area and will invite the regulators to become involved.

**ACTION: AEA & BAA**

Recommendation E
Recommendation E was for agrochemical manufacturers to provide information on dosage-response curves and the mode of action of pesticides. The Forum agreed that it would be helpful if more information on the efficacy of pesticides at different dose levels could be provided directly to farmers so that they could make informed decisions about reducing doses.

**ACTION: MEMBERS**

Recommendation F
Recommendation F was for funders to ensure that information on new techniques was fully coordinated to produce an authoritative guide on integrated farming. The Forum agreed to this recommendation in principle, though it was felt that an authoritative distillation of research findings from IACPA members was more appropriate than a prescriptive guide which may not provide the necessary flexibility to allow site-specific decisions to be taken. Members and Departments to consider further support for IACPA to undertake this work.

**ACTION: MEMBERS & DEPARTMENTS**

Recommendation G
Recommendation G was for there to be increased opportunities to see responsible pesticide use being demonstrated locally. The Forum agreed in principle to this recommendation. It was also felt that demonstration farms needed to have access to the latest research findings so that they were able to update practice rapidly. Members and Departments to consider ways in which greater support could be given to existing demonstration farms.

**ACTION: MEMBERS & DEPARTMENTS**
Recommendation H
Recommendation H was for farmers and advisers to receive more training in integrated farming. The Forum agreed with this recommendation. The new BASIS/LEAF ICM course will provide suitable training. The secretariat is to report the findings of the survey of ICM teaching in further education establishments to the next Forum meeting.

ACTION: SECRETARIAT

Recommendation J
Recommendation J was for retailers to frequently update contracts and crop protocols to take account of the latest techniques and technologies. The Forum agreed with this recommendation. Paul Willgoss offered to consult retailers on a mechanism to improve the information available with which to update crop protocols.

ACTION: PAUL WILLGOSS

Recommendation K
Recommendation K was for the Government to explore further ways of providing financial incentives to farmers to take up integrated techniques. This recommendation was agreed by the Forum, MAFF to note recommendation. Some provisions already exists within wider schemes. Although there are currently no plans for further provision, the position should be kept under review.

ACTION: MAFF

8.2 The secretariat will incorporate the Forum's response to the technology transfer sub-group report in the annual report.

ACTION: SECRETARIAT

9. Crop protocols and assurance schemes (PF/34)

9.1 Tim Davis presented paper (PF/34) on the current position with regard to crop protocols and assurance schemes and proposing possible criteria that the Forum might use as a guide to those developing such schemes.
9.2 In the seventh criterion in Annex A of PF/34 it was suggested that the phrase "follow the product label" could be replaced by "use the pesticide within the conditions of its approval". Members were asked to provide any further comments on the criteria to the secretariat.

**ACTION: MEMBERS**

9.3 The Forum considered that the criteria should be viewed as desirable features of a crop protocol or assurance scheme rather than a mandatory checklist. The secretariat will include them in the annual report and will circulate report PF/34 to those running crop protocols and assurance schemes for comment.

**ACTION: SECRETARIAT**

10. **Draft annual report of the Forum (PF/35)**

10.1 Tim Davis presented the draft annual report of the Forum.

10.2 Members felt that the Forum had made more progress than the report indicated and it was suggested that information paper PF/39 on initiatives on best practice could be included. Members were asked to send any further comments on the report to the secretariat.

**ACTION: MEMBERS**

10.3 The secretariat will redraft the report in the light of comments received and present it to the November ACP meeting. The ACP will be invited to provide views on the intended work programme for the Forum during 1998 and to suggest any further areas of activity which merit consideration by the Forum.

**ACTION: SECRETARIAT**

10.4 The final text of the report will be cleared with Forum members by correspondence, with a view to publishing the report early in 1998.

**ACTION: SECRETARIAT**

11. **Any Other Business.**

11.1 Andy Croxford presented paper PF/36 that proposed dates of meetings and work priorities for 1998.

11.2 Members were content with the proposed dates. The next meeting will be 11 February 1998.
11.3 At the suggestion of members, the secretariat agreed to arrange for a future meeting to discuss the implications of Genetically Modified Crops on pesticide use.

ACTION: SECRETARIAT

11.4 Further work on identifying practices and technologies that are the most effective and practical for reducing the impacts of pesticides was considered a high priority for 1998. It was also suggested that there should be an update on the Integrated Farming System project.

11.5 The secretariat were asked to circulate a draft programme for the 1998 meetings to members for comment.

ACTION: SECRETARIAT

Joint Secretariat, Pesticides Forum
October 1997
ANNEX A

THOSE PRESENT AT THE FIFTH MEETING OF THE PESTICIDES FORUM

Chairman
Dr David Shannon  Chief Scientist, MAFF

Members
Professor Sir Colin Berry  Advisory Committee on Pesticides
Dr Anne Buckenham  British Agrochemicals Association
Dr Keith Dawson  United Kingdom Agricultural Supply Trade Association
Professor Paul Miller  Agricultural Engineers Association
Dr David Brightman  National Farmers' Union
Mr Charles Russell  Scottish Farmers' Union
Mrs Helen Bower  Women's Farming Union
Mr Peter Beaumont  The Pesticides Trust
Dr Nick Sotherton  The Game Conservancy Trust
Mr David Richardson  Linking Environment and Farming
Mr John Terry  Farming and Wildlife Advisory Group
Mr Paul Willgoss  Fresh Produce Consortium/British Retail Consortium
Mr Jim Orson  ADAS
Dr Stuart Wale  Scottish Agricultural College
Mr David Barnett  Country Landowners Association

Presenters
Dr Fraser Quin  Scottish Agricultural College
Ms Lesley Moore  
Mr Anthony Footitt  
Mr Paul Reaston  
Mr Tim Davis  
Dr John Sherlock

**Observers**

Mr Dudley Coates  
Mr Geoff Bruce  
Dr Peter Corcoran  
Ms Jane Hartshorne  
Mr John Bouckley  
Mr Roy McLachlan

**Secretariat**

Dr Andy Croxford  
Mrs Alex Mason
ANNEX B

ACTION LIST

SECRETARIAT

1. PSD to circulate SAC final report on pesticide indicators.

2. Circulate to Forum summary of the Pesticide Usage Survey Group results on IPU.

3. Consider existing surveys to establish whether there are important information gaps in judging the progress of pesticide use policy.

4. Explore the possibility of producing a small number of Standard Operating Procedure cards.

5. Draw attention of major funders and research organisations to the technology transfer sub-group report.

6. Report findings of the survey of ICM teaching in further education establishments.

7. MAFF to note technology transfer sub-group recommendation to explore further ways of providing financial incentives to farmers and growers to take up integrated techniques.

8. Incorporate the Forum's response to the technology transfer sub-group report in the annual report.

9. Include criteria for crop protocols and assurance schemes in annual report and circulate report PF/34 to those running such schemes for comment.

10. Present redrafted annual report to the November ACP.


12. For a future Forum meeting, arrange discussion of the implications of Genetically Modified Crops for pesticide use.

MEMBERS

1. Pesticides Trust and FWAG to present their work to the Forum on providing greater information to farmers on the environmental impact of pesticides.

2. **Nick Sotherton** to provide a paper on using surveys of non-target species as indicators of pesticide impact.

3. Provide additional written comments on pesticide indicators to the secretariat, so that a further paper can be written.

4. Send any further comments on RPA/Entec report to the secretariat, to be passed on to the contractors.

5. **Paul Miller** to provide information on the sales of sprayer machinery and their environmental features.

6. Consider how more information on the efficacy of pesticides at different dose levels could be provided directly to farmers.

7. AEA and BAA to invite regulators to become involved in their discussions on pesticide application technology.

8. **Paul Willgoss** to consult retailers on a mechanism to improve the information available with which to update crop protocols.

9. Provide any further comments to the secretariat on the proposed criteria for crop protocols and assurance schemes.

10. Provide any further comments to the secretariat on the annual report.

MEMBERS AND SECRETARIAT

1. Seek opportunities to provide greater publicity for the work of the Forum.

2. Consider further support for IACPA.

3. Consider ways in which greater support could be given to existing demonstration farms.
ANNEX C

PROPOSED PESTICIDE FORUM WORK PROGRAMME FOR 1998

February

- Presentation and discussion of RSPB report on indirect effects of pesticides on farmland birds

- Identify how greater emphasis might be given to responsible pesticide use in statutory training schemes and whether field sale representatives, spray operators and advisers should be encouraged to hold an appropriate ICM qualification (Action 9)
  - Consideration of survey of agricultural professors/principals on teaching of ICM (Dr Corcoran/DETR ?)
  - Progress report from BASIS/LEAF on ICM course (Mr Orme/BASIS ?)

- Identify how farmers/growers could be provided with better information about the environmental impact of individual pesticides (Action 8)
  - Report from Pesticides Trust/FWAG (Mr Beaumont/PT ?)

- Further work on identifying practices and technologies that are the most effective and practical for reducing the impacts of pesticides (Action 4)
  - Presentation from IACPA (Dr Wall/MAFF ?)

- Consideration of DETR consultation paper on economic instruments for water pollution
  - Presentation from DETR (Kevin Lloyd ?)
June

- Advise on how best to encourage better practice in pesticide application and how to encourage innovative technology (Action 7)
  - Report from Paul Miller on the sales of sprayer machinery and the environmental features
  - Report from AEA/BAA on their discussions on pesticide application technology

- Review progress in implementing technology transfer sub-group recommendations (Actions 5&6)
  - Production of Standard Operating Procedure cards
  - Response of major funders and research organisations to report
  - Provision of support to IACPA to draw together advice based on research findings
  - Provision of further support for existing demonstration farms

- Further work on identifying practices and technologies that are the most effective and practical for reducing the impacts of pesticides (Action 4)
  - Presentation by the Scottish Natural Heritage on TIBRE

- Further work on monitoring progress (Action 10)
  - Consideration of SAC final report on indicators
  - Consideration of the need for further surveys to judge the progress of pesticide use policy including surveys of indicator non-target species

- Reducing point source pesticide pollution
October

- Discussion of the implications of Genetically Modified Crops on pesticide use

- Further consideration of crop protocols and accreditation schemes (Actions 2 & 3)
  - Comments on criteria for crop protocols and assurance schemes from those who run the schemes
  - Further thoughts on encouraging uptake
  - Setting up a mechanism to improve the information available with which to update crop protocols

- Presentations from Focus on Farming Practice, Integrated Farming Systems and/or the Allerton Trust?