



AAB President: Professor Christine Watson



ASSOCIATION OF APPLIED BIOLOGISTS

**REPORT OF THE TRUSTEES
& FINANCIAL STATEMENTS
FOR 2016**

**NOTICE OF
ANNUAL GENERAL MEETING**

26 September 2017

THE ASSOCIATION OF APPLIED BIOLOGISTS
(Registered Charity No. 275655)

ANNUAL GENERAL MEETING AGENDA

Harper Adams University, Newport, Shropshire, TF10 8NB
at 12:30 pm on Tuesday 26th September 2017

The AAB Annual report is made accessible to all members before the AGM and it is advised that you have read this before the meeting.

Attendance and apologies for the AGM are recorded in writing and hence do not form part of the oral business of the meeting.

- 1) **Minutes of the AGM held on 9th September 2016**; at University of Edinburgh
- 2) **Trustees Report of Activity 2016**
President's Report
Reports from the Specialist groups
Questions and discussion by members
- 3) **Financial Report 2016**
Presentation of report
Questions and discussion by members
- 4) **Appointment of Auditors for 2018**
Council propose the appointment of Cleres of Birmingham as auditors for 2018.
- 5) **Membership fees**
Council is proposing the following membership fees for 2018. This represents no change for any membership category.
Ordinary: £60
Retired: £30
Student: £20
- 6) **Subscription for *Annals of Applied Biology***
Council is proposing that there is a small increase in the subscription for *Annals of Applied Biology* which simply recoups the increased charge levied on the Association by the publisher (Wiley-Blackwell).
- 7) **Honorary Officers**

Honorary Treasurer & Honorary Secretaru

We have been actively seeking a new Honorary Treasurer and Honorary Secretary to replace Mr Mike May and Dr Elizabeth Stockdale; we are pleased to report that Mr Andy Page and Prof. Martin Parry have respectively offered to take on these roles.

More details are given in the mem voting papers

Following background checks and references, Council are now nominating Mr Andy Page and Prof. Martin Parry to begin their first formal terms in January 2018

Other Honorary Officers for 2018, to note:

President – Prof. Christine Watson (presidential term ends at end of 2018)

President Elect – Mr Stuart Knight (serving in this until the end of 2018 then as president of the Association 2019–2020)

Programme Secretary – Prof. Nigel Halford (serving final term 2016–2018)

Publications Officer – Prof. Roy Kennedy (serving 2nd term 2017–2019)

Meetings' Treasurer – Mr Richard Glass (serving 2nd term 2017–2019)

Conveners of specialist groups for 2018; to note:

Applied Mycology and Bacteriology – Dr Tim Pettitt

Biological Control and IPM – Prof. Toby Bruce

Cropping and the Environment – Dr Rob Carlton

Food Systems – Dr Wendy Russell

Nematology – Dr Matthew Back

Pesticide Application – Dr Tom Robinson

Plant Physiology and Crop Improvement – Dr Guy Barker

Soil Biology – Dr Matthew Shepherd

Virology – Dr Maruthi Gowda

8) **Early-Career Scientist Champion**

Approval of role

Appointment of Early-Career Scientist Champion

9) **Any other issues raised by members for discussion**

FINANCIAL REPORT 2016

Income & Expenditure

The global financial situation continued to improve in comparison to recent years, but now contains a large element of uncertainty. The societies' investments have been slow to grow but still produced a small usable income. The Association continues with the long-term objective of operating with a neutral or slightly positive net movement in funds within a sustainable business plan, which includes investment expenditure. The results of this year, which has seen the third full year of publication of the *Food and Energy Security Journal* (FESJ), has resulted in an operating deficit of £31,714 (before investment gains/losses) and compares against a budgeted deficit of £25,826. The budget took into account a smaller conference programme than normal and a trial of video recording of conferences. Publications continue to be a major income stream with income received for *The Plant Biotechnology Journal* delivering £34,640 against £24,719 for 2014. Income received for *Annals* (£62,951 compared to £72,229 for 2014) is in line with that budgeted (£63,330). The investment required in FESJ (£8,542) was lower than budgeted (£11,187) and lower than in 2014 (£14,262). Work is still on going towards an impact factor and it is still expected to be some years before the investment in this journal starts to make a return to the Association.

Governance costs (£93,289) have now returned to their pre-2014 levels as the change in the timing of payments from our publisher have become embedded. The meetings programme generated a loss of £44,579 against a budgeted loss of £23,487, mainly as a result of low attendance at one main conference and consequent room fees. Sponsorship and donations (£16,105) were considerably higher than budgeted (£2,790), mostly as a result of generous support for the conferences that took place in 2015.

The investment portfolio produced a small reduction of £6,204 compared to gain of £10,727 in 2014, largely due to the need to drawdown funds to cover cash flows and fund trials of conference videos.

Balance sheet

The Association's assets have decreased by £34,004 over the past year. The value of cash and investments has decreased during the year from £483,965 to £449,961 as a result of the activities mentioned above. The net current assets are increased by £27,036 compared to last year at a positive value of £73,861. As always, funds may be drawn from the portfolio of quoted investments as required and without undue delay to bolster the Association's working capital, however, it is hoped that this can be avoided over the next 12 months which will hopefully provide some stability to the investment portfolio value.

2016

The forecast for 2016 predicts a small operating profit at £4,148.

Forecast of Expenditure for 2016

The overall objective of the Trustees is to ensure a sound financial footing for the Association into the future enabling it to pursue its charitable aims and objectives. The review of strategic targets with a view to achieving a sustainable financial situation continues. All avenues of appropriate activities will be explored with the aim to increase revenue through running meetings for the Association and for others, seeking to expand membership and the continued tight control of operational expenditure with the aim of minimising overhead costs. The investment in the FESJ is not expected to generate income within the next few years but should start to repay the investment after that.

Proposed Membership Fees for 2017

The trustees' goal of raising a third of the general administrative costs from membership fees remains in place. However, bearing in mind the financial restrictions faced by members the fees were not increased for two years but it is proposed that membership is now raised. The Council proposes fees for 2017 remain at £60 for the Ordinary membership, £20 for Student members and £30 for Retired membership. The discounts of £3 for Ordinary and £1.50 for Student and Retired members will be retained for those who pay by direct debit and, providing the subscription is received before the start of the year to which it applies, for those who pay by cash, cheque or credit or debit card.

Proposed members' subscription rates for 'Annals' for 2017

The Council proposes that the members' subscriptions for 2017 are increased to £82.58 for the printed version (UK and overseas), £71.27 (including VAT); £59.40 (overseas) for the online only version, and £109.99 (including VAT); £104.75 (overseas) for the combined print and online subscription.

Statement of Trustees' Responsibilities

Charity law requires the Trustees to prepare financial statements for each financial year that give a true and fair view of the state of affairs of the Charity and of the surplus or deficit of the Charity for that period. In preparing those financial statements, the Trustees are required:

- to select suitable accounting policies and then apply them consistently;
- to make judgements and estimates that are reasonable and prudent; and
- to prepare financial statements on the going concern basis unless it is inappropriate to presume that the Charity will continue its activities.

The Trustees are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Charity and to enable them to ensure that the financial statements comply with the requirements of the 'Accounting by Charities - Statement of Recommended Practice' ('Charities SORP')

Risk Management

The trustees regularly review major operational and business risks to the charity and take such steps as are needed to mitigate them. The trustees believe that the current reserves are adequate in the light of those risks.

Reserves Policy

To respond to the need for long-term financial stability we have approved a reserves policy which is set out here.

A core purpose of the Association is to promote the study and advancement of Applied Biology. This obligation brings with it the need to ensure that the charity has sufficient funds over the short to medium term to continue to operate. To achieve this, the Association must achieve a sufficient positive annual operating contribution, or have sufficient reserves to call upon, to continue operations.

The main features of the Association's reserves policy are as follows:

- they are an inherent part of the Association's risk management process. The need for reserves will vary depending on the Association's financial position and our continuous assessment of the many risks the Association faces at a particular time
- the need for reserves will be assessed as part of our strategic planning.
- reserves exist either to provide short-term protection against downward fluctuations in annual revenues, or to provide long-term strategic financial support for future projects as has been carried out in the recent past with the Plant Biotechnology Journal
- the reserves policy balances the need to maintain long-term reserves against the need for short-term spending on our core purpose

This reserves policy will be reviewed annually to ensure it accurately reflects the circumstances of the Association and the views of the Trustees.

Investment Policy and Performance

There are no restrictions on the Association's power to invest. Its investment portfolio is managed by Private Banking Lloyds TSB, whose performance the trustees review. It is the Association's policy to avoid high risk investments.

ASSOCIATION OF APPLIED BIOLOGISTS

Reg. Charity No. 275655

The objects of the Association shall be to promote the study and advancement of all branches of Biology and in particular (but without prejudice to the generality of the foregoing) to foster the practice, growth and development of applied biology, with a focus on the application of biological sciences in the production of food, materials and energy and for the maintenance and improvement of the earth's environment.

Association of Applied Biologists
Annual General Meeting
Appleton Tower Lecture Theatre 1, University of Edinburgh, EH8 9LJ
Friday 9th September 2016

The meeting commenced at 12.20 pm.

The AAB Annual report had been made accessible to all members 14 days before the AGM and the notice of the meeting also included information on the matters for discussion and vote.

20 members were in attendance; 7 apologies from members had been received before the meeting with 3 sets of proxy votes.

1) Minutes of AGM held on 8th September 2015; Harper Adams University, Newport, Shropshire

There were no amendments required. The meeting agreed that the Minutes as presented were a correct record of the meeting and they were therefore signed by the Chair.

2) Trustees Report of Activity 2015

The Chair noted the President's Report and the separate reports from the Specialist groups which together make up the Report of Activity for 2015. The report shows that there had been a successful conference programme in 2015 and also reports the on-going growth and improving impact factors for Plant Biotechnology Journal and the Annals of Applied Biology. The Chair highlighted the thanks recorded for the work of the Editors in Chief of the publications. The Chair also drew attention to, and reinforced, the thanks of the President on behalf of members to the AAB office team for their work during 2015.

The chair noted that in his report the President was looking forward to the 14th Congress of the European Society of Agronomy. The Chair was pleased to confirm to members that this Congress, organised by the AAB and held in Edinburgh, had just taken place and that the scientific programme had run very successfully. Graham Russell proposed that the report of the Trustees (including Specialist Group reports) should be accepted for publication as a full and complete report for the activities of the Association in 2015. This proposal was seconded by Bill Thomas, and the proposal was unanimously agreed by the meeting.

3) Financial Report 2015

The General Treasurer (Mike May) presented the Financial Report to the members confirming that this had been inspected and approved by Cleres of Birmingham. He reminded members that the aim of the Association was to return a neutral or slightly positive balance overall. In 2015, there was a larger deficit on conferences/meetings than had been budgeted; this was largely the result of one conference where numbers of attendees had been lower than expected, but where the booked venue levied shortfall charges. In 2015 publications had continued to make a significant contribution to the income of the AAB; the AAB had continued to make investment in the Food and Energy Security Journal, though the incurred expenditure was less than had been predicted. The work of the editors should result in the achievement of an Impact Factor for the new journal soon. In 2015, the Association had also invested in a pilot project which had investigated the use of video of talks / abstracts / interviews alongside the printed conference outputs. Governance costs overall were at a more typical level. Overall, the assets of the Association had reduced slightly during 2015.

Mike May noted that currently the Association was expecting to return a small operating profit in 2016.

There were no questions from the floor.

Kairsty Topp proposed that the full financial report for the Association in 2015 presented by Trustees after audit by Cleres of Birmingham should be accepted for publication. This proposal was seconded by Ron

Stobart and the proposal was unanimously accepted by the meeting.

The General Secretary noted that the Annual and Financial reports would now be sent on to the Charity Commission as part of the required reporting of the AAB.

4) Appointment of Auditors for 2017

The Treasurer presented the Council proposal that Cleres of Birmingham be appointed as auditors for 2017. There were no questions from the floor and the proposal was unanimously accepted by the meeting.

5) Membership fees

The Treasurer presented the Council proposal that the membership fees for 2017 are unchanged for any membership category. He noted that although costs had increased slightly, nonetheless there had been no significant salary increases in the sector. He noted that his preference was to review the membership fees biannually given the cost to the AAB associated with any change.

Ordinary: £60; Retired: £30; Student: £20

There were no questions from the floor and the proposal was unanimously accepted by the meeting.

6) Subscription for Annals of Applied Biology

The Treasurer presented the Council proposal that there is a small increase in the subscription for Annals of Applied Biology which simply recoups the increased charge levied on the Association by the publisher (Wiley). The Treasurer noted that these new charges had not yet been notified to the AAB by Wiley; hence the indicative figures notified to the members in the notice of the meeting were not correct.

There were no questions from the floor and the proposal was unanimously accepted by the meeting.

7) Honorary Officers

The General Secretary confirmed that no nominations from members had been received since the notice of the AGM had been sent out.

The Chair confirmed that Council was happy to nominate two existing post-holders to serve a further term as Honorary officers, as outlined in the Laws:

Publications Officer- Dr Roy Kennedy (current term (1st) expires at end of 2016) to serve 2nd term 2017-2019
Meetings' Treasurer – Dr Richard Glass (current term (1st) expires at end of 2016) to serve 2nd term 2017-2019

There were no questions from the floor and the nominations were unanimously accepted by the meeting.

President-Elect

The Chair noted that Professor Bill Davies would complete his two year term as AAB President at the end of 2016. Hence Professor Christine Watson would take on the role of President. Council are very happy to be able to nominate Mr. Stuart Knight as President-Elect for 2017-2018 then as President of the Association 2019-2020.

Stuart Knight is the Deputy Director of NIAB, with a particular focus on the Group's science. He has 25 years of experience as a research agronomist, and has worked in university, institute and independent RTO environments, at the interface between research and practice. His interests cover most aspects of combinable crop agronomy, and the impact of farming systems and practices on the economic and environmental performance of farms. Stuart was heavily involved in establishing and organising the first two AAB 'Crop Protection in Southern Britain' conferences in 2007 and 2009, and he believes that AAB workshops, conferences and journals play a vital role in bringing together academia and industry, promoting applied research and achieving knowledge exchange through an accessible format and a spirit of inclusiveness. Stuart's ambition for the Association is to encourage, inspire and connect the next generations of applied biologists wherever they work, to ensure that sound, practical science remains at the heart of our future food, energy and environment.

The members noted this statement of interests submitted by Stuart. There were no questions from the floor and the nomination was unanimously accepted by the meeting.

Mr Stuart Knight will therefore serve the AAB as President-Elect from 2017.

Honorary Treasurer

The Chair reminded members that Mike May had given notice of his intention to stand down as General Treasurer after the completion of his term at the end of 2016.

The Chair updated members on behalf of Council that a range of steps are currently being taken to seek a new Honorary Treasurer; however, there is, as yet, no candidate to nominate formally at this AGM for appointment from January 2017. A member asked how this search was being undertaken. The General Secretary confirmed

that as well as contacting members, a number of accountancy volunteering websites have been identified and also that, at July Council, Council agreed a budget of up to £1500 for advertising to be used if these free websites did not yield any interest e.g. though RHS magazine etc

The Chair confirmed that Council are therefore asking the permission of members to appoint an appropriate candidate (once identified) on a temporary basis ideally to start in January 2017 – the full appointment would then follow through nomination and election at the next AGM.

There were no further questions from the floor and members unanimously agreed the Council proposal.

The Chair confirmed the other Honorary officers for 2017 as:

- President – Prof Christine Watson (presidential term ends at end of 2018);
- General Secretary - Dr Elizabeth Stockdale (FINAL term (3rd) expires at end of 2017);
- Programme Secretary - Prof Nigel Halford (serving final term 2016-2018).

The Chair also noted the Conveners of specialist groups for 2017; these are elected by the group and can serve up to 2 × 3-year terms

- Applied Mycology and Bacteriology - Dr T. Pettitt
- Biological Control and IPM - Prof. T Bruce
- Cropping and the Environment - Dr R Carlton
- Food Systems - Dr W Russell
- Nematology - Dr M Back
- Pesticide Application - Mr Tom Robinson
- Plant Physiology and Crop Improvement - Dr Guy Barker
- Virology - Dr M Gowda

The Chair noted that Drs Pettitt, Russell and Barker are taking on the role of convener for the first term.

Dr Wendy Russell was present and introduced herself to the members. She is an active researcher working across food systems, including links with growers and producers, based at Rowett Research. She has a similar co-ordinating role for a group of members in the Royal Society of Chemistry and spoke with enthusiasm of the opportunities for engagement across the topic area and how the two groups would be able to work together.

8) Proposal to form a new Specialist Group ... Soil Biology

The Chair noted the proposal from a group of members to form a new Specialist Group – Soil Biology; the proposal had been considered by Council and has been forwarded to the AGM:

Currently within the UK research community, there is considerable expertise in soil biology including specialists who would otherwise call themselves soil scientists, ecologists, taxonomists, agronomists, microbiologists, entomologists and even farmers. While other organisations are focussed on one or two aspects of the soil ecological system, there is no organisation in the UK currently providing a platform for broad discussions on issues at the forefront of the agenda for soil biology and health such as suppressiveness of soils to disease, soil function and health, resilience to climate change. Over the next 5 years, there will be a funded AHDB research partnership on soil biology and health and there are on-going soil biology-related programmes funded by NERC and BBSRC, together with EC H2020-funded projects in this area such as SOILCARE. Consequently many of the discipline-based groups within the AAB have already organised meetings and have members that reflect the importance of soil biology within plant-soil systems e.g. Improving Soil Health - Developing tools for land managers (April 2015); International Symposium of Biofumigation (September 2014); Nematodes as Environmental Bioindicators (July 2012). Furthermore, recent advances in genetic and other biochemical techniques now provide new ways to explore and characterise soil communities, and are beginning to reveal the true complexity, and functional importance, of soil communities. This includes work by major European projects such as ECOFINDERS and through emerging funded research projects such as BioInvent, SoilForEurope and SoilMan.

In September 2014, Matthew Shepherd (Natural England) organised a soil biodiversity meeting at RAU, Cirencester as a follow-up to a meeting held at the Natural History Museum in 2012. Over 50 people attended each of these one-day meetings. As a result of further discussions at these events, the establishment of a soil biology network, community or society was agreed as a key action to take forward. A Facebook-mediated discussion group has been established, but it is now considered timely to ask whether a Soil Biology group could be established as a separate specialist group within AAB as its aims fit well with those of the AAB.

From the floor of the meeting, members noted that the development of new specialist groups in this way was likely to attract new members to the AAB. Members also noted the importance of establishing good links between this group and existing groups to allow synergy rather than competition to develop. The General

Secretary noted the feedback of one member sent with their apology that he is working at the interface of plant physiology and soil biology and hence would encourage the development of links between PP&CI and the new group as well as the links already noted in the proposal.

There were no further questions from the floor and members unanimously agreed the proposal to establish a new specialist group submitted by members.

The General Secretary noted that this group would work with the CATE group to organise a meeting in spring 2017, Advances in Soil Biology, perhaps with a focus on measurement and monitoring on-farm.

9) Update to AAB strategic plan

The General Secretary noted that each two years the AAB develops a new strategic plan in association with the term of the new President. Hence the President-Elect circulated a number of questions to members together with the AGM announcement to stimulate discussion to help underpin her consideration of appropriate targets / areas for focus.

Discussion from the floor highlighted the importance of developing active groups across the AAB, rather than simply having as many groups as possible. Groups should also look for synergies and interactions between their topic areas rather than simply operate in silos. Members present could not identify any areas where it was essential that the AAB brought members together in any new specialist group; it was felt that the process of facilitating members who had specific interests to become a group (as had taken place for Soil Biology) was appropriate.

Members considered that it was important for the Association to continue to interact directly with with agri-business and industry and increase engagement in this area where possible. It was noted that some AAB workshops and meetings are considered to be of particular value to industry practitioners; the AAB is an association which regularly brings together researchers and the industry sector. However this often happens on an ad hoc basis and there is opportunity to look for new opportunities. The AAB seeks CPD points for its meetings (usually through BASIS) but it could also be possible to develop a range of different “conference packages” that could be offered to industry. For example, one outcome of a conference could be a presentation that summarises the key issues/ outcomes which one of the organising committee could be authorised to deliver to industry meetings. A second option would be to organise a specific workshop to follow up the conclusions of a conference and explore their application directly with industry. It was suggested that in the first instance that this could be piloted through the specialist groups with one or two conferences identified.

Members supported the idea that there should be a formally recognised role as a young scientist/ student member on Council and that this person should be given trustee status. One suggestion from the floor was that this person would act as a first point of contact within the Association for students and young scientists and facilitate their introduction and links with the society as a whole. It was noted that some group committees had successfully recruited young scientists and students onto the committees. It was suggested that the definition of early-career scientist used in Europe be used by the AAB i.e. scientists within 7 years of completing their PhD.

Members confirmed that wherever possible the Association should engage with other Societies and groups, especially those operating to deliver very similar charitable objectives. Members welcomed the opportunity for working with the Royal Society of Chemistry on food systems, as highlighted by Wendy Russell earlier. Members noted the recent areas of collaboration and also suggested making/developing links with ISTRO e.g. to organise a meeting on conservation agriculture. The role of the KTNs in promoting knowledge exchange was noted; currently no links have been made with the KTNs and it was considered that this might be a fruitful area of discussion for the future. However, it was noted that the AAB should seek to maintain a distinct and separate role; effective collaborative partnerships needed to be of value to both organisations.

Christine Watson thanked members for their input and invited anyone with any further thoughts to contact her directly.

10) Communication to members

The Chair noted that at its July meeting Council discussed new approaches to communication/newsletters for members. Council are proposing that from 2017 there will be more regular short updates (e.g. monthly) sent out by Email; hence communication of meeting reports will be sent out more quickly and more regularly to members.

Members welcomed this proposal but noted that the communication should be regular but not necessarily monthly, i.e. the office team should not feel forced to do something just to meet a schedule. It was suggested

that the Email should be presented as a list of “headlines” with a link from each to any more detailed material e.g. a full meeting report. Ron Stobart noted that the communications team at NIAB regularly send out newsletters of this sort and hence the design/set up might be something that they could advise on. He noted that he would be happy to provide the link to Carol so that the office could follow this up when appropriate. There were no further questions from the floor and members unanimously agreed the proposal to move to regular updates rather than a newsletter.

11) Any other issues raised by members for discussion

Graham Russell asked whether the AAB had carried out any risk assessment relating to BREXIT. The General Secretary and Treasurer confirmed that this had not been done; however, they noted that the routine update of the Risk Register would be done alongside the budgeting process and hence would begin in the autumn. It was agreed by members that there were likely to be some risks emerging from BREXIT for the AAB and that these should be considered fully in the risk assessment prepared alongside the 2017 budget.

The members proposed a vote of thanks to Carol Millman and the team in the office who have been working hard to maintain the work of the Association and have done this effectively despite staff changes and illnesses.

Signed as a true record

Date.....

The Association of Applied Biologists

Annual Report and Financial Statements

for the Year Ended 31 December 2016

The Association of Applied Biologists

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The Association of Applied Biologists

Reference and Administrative Details

Chief Executive Officer

Mrs. C A Millman

Trustees

Prof. C Watson, President (appointed 1 January 2017)

Mr S Knight, President Elect (appointed 1 January 2017)

Dr E A Stockdale, General Secretary

Mr M May, General Treasurer

Prof. N G Halford, Programme Secretary

Dr R Kennedy, Publications Officer

Mr C R Glass, Conferences Treasurer

Prof. W Davies, President (resigned 1 January 2017)

Dr M Back, Nematology

Dr G Barker, Plant physiology & crop improvements (appointed 1 November 2016)

Dr T Bruce, Biological Control

Dr R Carlton, Cropping & the environment

Dr M Finlay Dale, Plant Physiology & crop improvements (resigned 1 November 2016)

Dr M Gowda, Virology

Prof. P Miller, Pesticide application (resigned 1 January 2017)

Mr T Pettitt, Applied mycology & bacteriology (appointed 1 June 2016)

Dr T Robinson, Pesticide application (appointed 1 January 2017)

Dr W Russell, Food systems (appointed 1 September 2016)

Dr M J Shepherd, Soil biology (appointed 20 April 2017)

Principal Office

AAB Office

Warwick Enterprise Park

Wellesbourne

Warwickshire

CV35 9EF

Charity Registration Number

275655

Solicitors

Martineau Johnson

St. Phillips House

St. Phillips Place

Birmingham B3 2PP

The Association of Applied Biologists

Reference and Administrative Details

Bankers

Barclays Bank plc
South Warwickshire Group of Branches
150 The Parade
Leamington Spa
Warwickshire
CV32 4A

Independent Examiner

Clere's Ltd
Chartered Certified Accountant
G.N.House
119 Holloway Head
Birmingham
B1 1QP

The Association of Applied Biologists

Trustees' Report

The trustees present the annual report together with the financial statements of the charity for the year ended 31 December 2016.

Objectives and activities

Objects and aims

The Object of the Charity is to ‘promote the study and advancement of all branches of Biology and, in particular, but without prejudice to the generality of the foregoing) to foster the practice, growth and development of applied biology, including the application of biological sciences for the production and preservation of food, fibre and other materials and for the maintenance and improvement of the earth’s physical environment’.

Objectives, strategies and activities

We deliver this charitable mission through the publication of scientific journals in applied biology, the organisation of conferences in a range of related subject themes, the formulation and dissemination of policies to promote the discipline, the production of a newsletter and the provision of services for members.

Public benefit

To promote the study and advancement of all branches of Biology and in particular (but without prejudice to the generality of the foregoing), to foster the practice, growth and development of applied biology, with a focus on the application of biological sciences in the production of food, materials and energy, and for the maintenance and improvement of earth's environment.

The trustees confirm that they have complied with the requirements of section 4 of the Charities Act 2011 to have due regard to the public benefit guidance published by the Charity Commission for England and Wales.

Achievements and performance

Whilst the recent global financial situation has been relatively good, the future contains a large element of uncertainty, particularly as the final effect of ‘Brexit’ is unknown. The Society’s investments have continued to produce a small usable income but some capital has been used to plug the shortfalls during 2016. The Association continues with the long-term objective of operating with a neutral or slightly positive net movement in funds within a sustainable business plan, which includes investment expenditure. The results of this year, which has seen the fourth full year of publication of the *Food and Energy Security Journal* (FESJ), has resulted in an operating deficit of £21,522 (before investment gains/losses) and compares against a budgeted increase of £4,147. The budget took into account fewer conferences than normal but did include the major conference (at Edinburgh in September). Publications continue to be a major income stream with income received for The *Plant Biotechnology Journal* delivering £16,176 against a reduced budget income of £27,900, caused by the large number of papers submitted prior to the journal’s change to open access. It is expected that income will return to pre-2016 levels in 2017. Income received for *Annals of Applied Biology* (£75,363 compared to £62,951 for 2015) is a slight increase compared with that budgeted (£69,615). The investment required in FSEJ (£9,773) was higher than budgeted (£8,850) and higher than in 2015 (£8,542). Work is progressing towards an impact factor and this is expected to reflect the good quality of papers published. However, it is still likely to be some years before the investment in this journal starts to make a significant return to the Association.

The Association of Applied Biologists

Trustees' Report

Financial review

Charitable activities

Income & Expenditure

The results of this year has resulted in an operating deficit of £21,524 (before investment gains/losses) and compares against a budgeted increase of £4,147.

Governance costs were £90,510. The meetings programme generated a loss of £32,738 against a budgeted loss of £8,394, mainly as a result of low attendance at the conference organised with ESA in September. Sponsorship and donations (£10,833) were lower than budgeted (£13,098).

The investment portfolio produced a similar return (£9,157) to that in 2015 (£9,335) despite the withdrawal of £25,000 to fund 2015/16 activities of the Association. A further drawdown was made in 2017 for use in 2018/19.

Balance sheet

The Association's assets have increased by £20,160 over the past year. The value of cash and investments has increased during the year from £448,658 to £490,017. The net current assets are increased by £4,555 compared to last year at a positive value of £73,864. As always, funds may be drawn from the portfolio of quoted investments as required and without undue delay to bolster the Association's working capital. During 2016 the Association purchased a new computer system to improve and facilitate conference bookings and administration. Within the coming year the Association is seeking to appoint a new member of staff to oversee its finances and office functions and this may require some drawdown of funds in the first year after appointment.

Policy on reserves

To respond to the need for long-term financial stability we have approved a reserves policy which is set out here. A core purpose of the Association is to promote the study and advancement of Applied Biology. This obligation brings with it the need to ensure that the charity has sufficient funds over the short to medium term to continue to operate. To achieve this, the Association must achieve a sufficient positive annual operating contribution, or have sufficient reserves to call upon, to continue operations. The main features of the Association's reserves policy are as follows:

- they are an inherent part of the Association's risk management process. The need for reserves will vary depending on the Association's financial position and our continuous assessment of the many risks the Association faces at a particular time
- the need for reserves will be assessed as part of our strategic planning.
- reserves exist either to provide short-term protection against downward fluctuations in annual revenues, or to provide long-term strategic financial support for future projects as has been carried out in the recent past with the *Plant Biotechnology Journal*
- the reserves policy balances the need to maintain long-term reserves against the need for short-term spending on our core purpose

This reserves policy will be reviewed annually to ensure it accurately reflects the circumstances of the Association and the views of the Trustees.

Investment policy and objectives

There are no restrictions on the Association's power to invest. Its investment portfolio is managed by Private Banking Lloyds TSB, whose performance the trustees review. It is the Association's policy to avoid high risk investments.

The Association of Applied Biologists

Trustees' Report

Plans for future periods

Aims and key objectives for future periods

Future Developments 2017

The forecast for 2017 predicts an operating loss of £17,647.

Forecast of Expenditure for 2017

The overall objective of the Trustees is to ensure a sound financial footing for the Association into the future enabling it to pursue its charitable aims and objectives. The review of strategic targets with a view to achieving a sustainable financial situation continues. All avenues of appropriate activities will be explored with the aim to increase revenue through running meetings for the Association and for others, seeking to expand membership and the continued tight control of operational expenditure with the aim of minimising overhead costs. The investment in the FESJ is not expected to generate income within the next few years but should start to repay the investment after that.

Proposed Membership Fees for 2017

The trustees' goal of raising a third of the general administrative costs from membership fees remains in place. Bearing in mind that membership fees were increased for 2016, the trustees propose to hold those fees for 2017 and 2018. Therefore the proposed fees for 2018 remain at £60 for the Ordinary membership, £20 for Student members and £30 for Retired membership. The discounts of £3 for Ordinary and £1.50 for Student and Retired members will be retained for those who pay by direct debit and, providing the subscription is received before the start of the year to which it applies, for those who pay by cash, cheque or credit or debit card.

Proposed members' subscription rates for 'Annals' for 2018

The Council proposes that the members' subscriptions for 2018 are raised in line with the increased fees to libraries and institutions agreed with our publishers to £82.58 for the printed version, £71.28 (including VAT) for the online only version (£59.40 for overseas) and £109.99 (including VAT) for the combined print and online subscription (£104.75 for overseas)

Structure, governance and management

Nature of governing document

Governing document

The charity is controlled by its governing document, a deed of trust, and constitutes an unincorporated charity.

The trust is an unincorporated trust, constituted under Laws of Association revised December 1977 and is a registered charity, number 275655.

Recruitment and appointment of trustees

All Trustees of the Association must be members of the Association of Applied Biologists. Trustees of the Association of Applied Biologists include the Honorary Officers of Council (the President, the President-elect, who shall normally succeed the President, the General Treasurer, the Meetings Treasurer, the General Secretary, the Programme Secretary, the Membership Officer, the Publications Officer plus any other person designated as an Honorary Officer at the Annual General Meeting) together with the Convenors of the Association's Specialist Groups. The Convenors are notified to the Annual General Meeting. The other Honorary Officers are elected at an Annual General Meeting. In the case of an unfilled position, trustees may be co-opted to office but must be elected at the following Annual General Meeting. The President of the Association of Applied Biologists will serve a maximum period of two years as President. The President-Elect will serve a maximum period of two years as President-elect.

The Association of Applied Biologists

Trustees' Report

Convenors are elected by members of the Group (at the last meeting of the year preceding the year of office) and may serve for up to six consecutive years, subject to annual re-election (a term of office for Convenors is deemed to be three years).

Induction and training of trustees

Potential Trustees of the Association of Applied Biology will be given copy of Association's Laws and copies of any other key documents relevant to the Charity or post.

The booklet 'Responsibilities of Charity Trustees' published by the Charity Commission gives a complete guide to the responsibilities of Charity Trustees and will be issued to all new Trustees who are expected to read it.

Trustees of the Association of Applied Biologists are expected to read the Laws of the Association of Applied Biologists, additional information provided by the Association and the booklet 'Responsibilities of Charity Trustees'.

A 'job description' of each Trustee post will be given to each new Trustee upon appointment. It is the responsibility of each post holder to review and update their particular job description by the end of October each year. Any changes are to be agreed by Council at its last full meeting of the year.

New trustees will be given an induction session with the Executive Officer and/or a serving Trustee of the Association.

Organisational structure

The business of the Association is conducted by a Council of Members.

Council shall consist of the Honorary Officers; President, President elect, General Secretary, General Treasurer, Chairman of the Editorial Boards, Membership Officer, Programme Secretary and Meetings Treasurer together with convenors of the AAB Specialist Groups.

Wider network

Affiliations were maintained with the Institute of Biology, the Foundation for Science and Technology and the Association of Learned and Professional Society Publishers. The Association has a Memorandum of Understanding with the European Society for Agronomy.

Financial instruments

Objectives and policies

The charity's activities expose it to a number of financial risks including credit risk, cash flow risk and liquidity risk. The use of financial derivatives is governed by the charity's policies approved by the board of trustees, which provide written principles on the use of financial derivatives to manage these risks. The charity does not use derivative financial instruments for speculative purposes.

Cash flow risk

The charity's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The charity uses foreign exchange forward contracts and interest rate swap contracts to hedge these exposures.

Interest bearing assets and liabilities are held at fixed rate to ensure certainty of cash flows.

The Association of Applied Biologists

Trustees' Report

Credit risk

The charity's principal financial assets are bank balances and cash, trade and other receivables, and investments. The charity's credit risk is primarily attributable to its trade receivables. The amounts presented in the balance sheet are net of allowances for doubtful receivables. An allowance for impairment is made where there is an identified loss event which, based on previous experience, is evidence of a reduction in the recoverability of the cash flows.

The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit -ratings assigned by international credit-rating agencies.

The charity has no significant concentration of credit risk, with exposure spread over a large number of counterparties and customers.

Liquidity risk

In order to maintain liquidity to ensure that sufficient funds are available for ongoing operations and future developments, the charity uses a mixture of long-term and short-term debt finance.

Further details regarding liquidity risk can be found in the Statement of accounting policies in the financial statements.

The annual report was approved by the trustees of the charity on and signed on its behalf by:

.....

Prof C Watson
Trustee

The Association of Applied Biologists

Statement of Trustees' Responsibilities

The trustees are responsible for preparing the trustees' report and the financial statements in accordance with the United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice) and applicable law and regulations.

The law applicable to charities requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period. In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011, the applicable Charities (Accounts and Reports) Regulations, and the provisions of the constitution. The trustees are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Approved by the trustees of the charity on and signed on its behalf by:

.....
Prof C Watson
Trustee

The Association of Applied Biologists

Independent Examiner's Report to the trustees of The Association of Applied Biologists

I report on the accounts of the charity for the year ended 31 December 2016 which are set out on pages 11 to 26.

Respective responsibilities of trustees and examiner

The trustees are responsible for the preparation of the accounts. The trustees consider that an audit is not required for this year under section 144(2) of the Charities Act 2011 (the 2011 Act) and that an independent examination is needed. The charity's gross income exceeded £250,000 and I am qualified to undertake the examination by being a qualified member of Clere's Ltd.

It is my responsibility to:

- examine the accounts under section 145 of the 2011 Act;
- to follow the procedures laid down in the general Directions given by the Charity Commission under section 145(5)(b) of the 2011 Act; and
- to state whether particular matters have come to my attention.

Basis of independent examiner's report

My examination was carried out in accordance with the general Directions given by the Charity Commission. An examination includes a review of the accounting records kept by the charity and a comparison of the accounts presented with those records. It also includes consideration of any unusual items or disclosures in the accounts, and seeking explanations from you as trustees concerning any such matters. The procedures undertaken do not provide all the evidence that would be required in an audit and consequently no opinion is given as to whether the accounts present a 'true and fair view' and the report is limited to those matters set out in the next statement.

Independent examiner's statement

In connection with my examination, no matter has come to my attention:

- (1) which gives me reasonable cause to believe that in any material respect the requirements:
 - to keep accounting records in accordance with section 130 of the Charities Act 2011; and
 - to prepare accounts which accord with the accounting records and comply with the accounting requirements of the 2011 Acthave not been met; or
- (2) to which, in my opinion, attention should be drawn in order to enable a proper understanding of the accounts to be reached.

.....
Stephen John Clere, FCCA
Chartered Certified Accountant
Clere's Ltd

G.N.House
119 Holloway Head
Birmingham
B1 1QP

Date:.....

The Association of Applied Biologists

Statement of Financial Activities for the Year Ended 31 December 2016

	Note	Unrestricted funds £	Restricted funds £	Total 2016 £
Income and Endowments from:				
Donations and legacies		11,901	-	11,901
Charitable activities		265,440	-	265,440
Investment income	4	9,157	-	9,157
Total Income		286,498	-	286,498
Expenditure on:				
Charitable activities		(304,545)	(3,477)	(308,022)
Total Expenditure		(304,545)	(3,477)	(308,022)
Gains/losses on investment assets		41,688	-	41,688
Net movement in funds		23,641	(3,477)	20,164
Reconciliation of funds				
Total funds brought forward		430,104	19,856	449,960
Total funds carried forward	17	453,745	16,379	470,124
<hr/>				
	Note	Unrestricted funds £	Restricted funds £	Total 2015 £
Income and Endowments from:				
Donations and legacies		16,213	-	16,213
Charitable activities		206,854	-	206,854
Investment income	4	9,335	-	9,335
Total Income		232,402	-	232,402
Expenditure on:				
Charitable activities		(263,939)	(311)	(264,250)
Total Expenditure		(263,939)	(311)	(264,250)
Gains/losses on investment assets		(2,154)	-	(2,154)
Net movement in funds		(33,691)	(311)	(34,002)
Reconciliation of funds				
Total funds brought forward		463,799	20,167	483,966
Total funds carried forward	17	430,108	19,856	449,964

All of the charity's activities derive from continuing operations during the above two periods.

The funds breakdown for 2015 is shown in note 17.

The Association of Applied Biologists

(Registration number: 275655)

Balance Sheet as at 31 December 2016

	Note	2016 £	2015 £
Fixed assets			
Tangible assets	12	5,666	1,270
Investments	13	386,039	374,830
		391,705	376,100
Current assets			
Debtors	14	65,042	119,641
Cash at bank and in hand		103,978	73,828
		169,020	193,469
Creditors: Amounts falling due within one year	15	(90,601)	(119,605)
Net current assets		78,419	73,864
Net assets		470,124	449,964
Funds of the charity:			
Restricted funds		16,379	19,856
Unrestricted income funds			
Unrestricted funds		453,745	430,108
Total funds	17	470,124	449,964

The financial statements on pages 11 to 26 were approved by the trustees, and authorised for issue on and signed on their behalf by:

.....

Prof C Watson

Trustee

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

1 Accounting policies

Statement of compliance

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Charities Act 2011.

Basis of preparation

The Association of Applied Biologists meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy notes.

Exemption from preparing a cash flow statement

The charity opted to early adopt Bulletin 1 published on 2 February 2016 and have therefore not included a cash flow statement in these financial statements.

Going concern

The trustees consider that there are no material uncertainties about the charity's ability to continue as a going concern.

Income and endowments

Voluntary income including donations, gifts, legacies and grants that provide core funding or are of a general nature is recognised when the charity has entitlement to the income, it is probable that the income will be received and the amount can be measured with sufficient reliability.

Donations and legacies

Donations and legacies are recognised on a receivable basis when receipt is probable and the amount can be reliably measured.

Expenditure

All expenditure is recognised once there is a legal or constructive obligation to that expenditure, it is probable settlement is required and the amount can be measured reliably. All costs are allocated to the applicable expenditure heading that aggregate similar costs to that category. Where costs cannot be directly attributed to particular headings they have been allocated on a basis consistent with the use of resources, with central staff costs allocated on the basis of time spent, and depreciation charges allocated on the portion of the asset's use. Other support costs are allocated based on the spread of staff costs.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

Charitable activities

Charitable expenditure comprises those costs incurred by the charity in the delivery of its activities and services for its beneficiaries. It includes both costs that can be allocated directly to such activities and those costs of an indirect nature necessary to support them.

Grant provisions

Provisions for grants are made when the intention to make a grant has been communicated to the recipient but there is uncertainty about either the timing of the grant or the amount of grant payable.

Governance costs

These include the costs attributable to the charity's compliance with constitutional and statutory requirements, including audit, strategic management and trustees's meetings and reimbursed expenses.

Tangible fixed assets

Individual fixed assets costing £0.00 or more are initially recorded at cost, less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

Depreciation and amortisation

Depreciation is provided on tangible fixed assets so as to write off the cost or valuation, less any estimated residual value, over their expected useful economic life as follows:

Fixed asset investments

Fixed asset investments, other than programme related investments, are included at market value at the balance sheet date. Realised gains and losses on investments are calculated as the difference between sales proceeds and their market value at the start of the year, or their subsequent cost, and are charged or credited to the Statement of Financial Activities in the period of disposal.

Unrealised gains and losses represent the movement in market values during the year and are credited or charged to the Statement of Financial Activities based on the market value at the year end.

Trade debtors

are amounts due from customers for merchandise sold or services performed in the ordinary course of business.

are recognised initially at the transaction price. They are subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for the impairment of is established when there is objective evidence that the will not be able to collect all amounts due according to the original terms of the receivables.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and call deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

Trade creditors

are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if the does not have an unconditional right, at the end of the reporting period, to defer settlement of the creditor for at least twelve months after the reporting date. If there is an unconditional right to defer settlement for at least twelve months after the reporting date, they are presented as non-current liabilities. are recognised initially at the transaction price and subsequently measured at amortised cost using the effective interest method.

Borrowings

Interest-bearing borrowings are initially recorded at fair value, net of transaction costs. Interest-bearing borrowings are subsequently carried at amortised cost, with the difference between the proceeds, net of transaction costs, and the amount due on redemption being recognised as a charge to the Statement of Financial Activities over the period of the relevant borrowing. Interest expense is recognised on the basis of the effective interest method and is included in interest payable and similar charges.

Borrowings are classified as current liabilities unless the charity has an unconditional right to defer settlement of the liability for at least twelve months after the reporting date.

Fund structure

Unrestricted income funds are general funds that are available for use at the trustees's discretion in furtherance of the objectives of the charity.

Restricted income funds are those donated for use in a particular area or for specific purposes, the use of which is restricted to that area or purpose.

Pensions and other post retirement obligations

The charity operates a defined contribution pension scheme which is a pension plan under which fixed contributions are paid into a pension fund and the charity has no legal or constructive obligation to pay further contributions even if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. Contributions to defined contribution plans are recognised in the Statement of Financial Activities when they are due. If contribution payments exceed the contribution due for service, the excess is recognised as a prepayment.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

Financial instruments

Classification

Financial assets and financial liabilities are recognised when the charity becomes a party to the contractual provisions of the instrument.

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the charity after deducting all of its liabilities.

Recognition and measurement

All financial assets and liabilities are initially measured at transaction price (including transaction costs), except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value (which is normally the transaction price excluding transaction costs), unless the arrangement constitutes a financing transaction. If an arrangement constitutes a financing transaction, the financial asset or financial liability is measured at the present value of the future payments discounted at a market rate of interest for a similar debt instrument. Financial assets and liabilities are only offset in the statement of financial position when, and only when there exists a legally enforceable right to set off the recognised amounts and the charity intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Financial assets are derecognised when and only when a) the contractual rights to the cash flows from the financial asset expire or are settled, b) the charity transfers to another party substantially all of the risks and rewards of ownership of the financial asset, or c) the charity, despite having retained some, but not all, significant risks and rewards of ownership, has transferred control of the asset to another party. Financial liabilities are derecognised only when the obligation specified in the contract is discharged, cancelled or expires.

Debt instruments

Debt instruments which meet the following conditions are subsequently measured at amortised cost using the effective interest method:

(a) The contractual return to the holder is (i) a fixed amount; (ii) a positive fixed rate or a positive variable rate; or (iii) a combination of a positive or a negative fixed rate and a positive variable rate.

(b) The contract may provide for repayments of the principal or the return to the holder (but not both) to be linked to a single relevant observable index of general price inflation of the currency in which the debt instrument is denominated, provided such links are not leveraged.

(c) The contract may provide for a determinable variation of the return to the holder during the life of the instrument, provided that (i) the new rate satisfies condition (a) and the variation is not contingent on future events other than (1) a change of a contractual variable rate; (2) to protect the holder against credit deterioration of the issuer; (3) changes in levies applied by a central bank or arising from changes in relevant taxation or law; or (ii) the new rate is a market rate of interest and satisfies condition (a).

(d) There is no contractual provision that could, by its terms, result in the holder losing the principal amount or any interest attributable to the current period or prior periods.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

(e) Contractual provisions that permit the issuer to prepay a debt instrument or permit the holder to put it back to the issuer before maturity are not contingent on future events, other than to protect the holder against the credit deterioration of the issuer or a change in control of the issuer, or to protect the holder or issuer against changes in levies applied by a central bank or arising from changes in relevant taxation or law.

(f) Contractual provisions may permit the extension of the term of the debt instrument, provided that the return to the holder and any other contractual provisions applicable during the extended term satisfy the conditions of paragraphs (a) to (c).

Debt instruments that are classified as payable or receivable within one year on initial recognition and which meet the above conditions are measured at the undiscounted amount of the cash or other consideration expected to be paid or received, net of impairment.

With the exception of some hedging instruments, other debt instruments not meeting these conditions are measured at fair value through profit or loss.

Commitments to make and receive loans which meet the conditions mentioned above are measured at cost (which may be nil) less impairment.

Investments

Investments in non-convertible preference shares and non-puttable ordinary or preference shares (where shares are publicly traded or their fair value is reliably measurable) are measured at fair value through profit or loss. Where fair value cannot be measured reliably, investments are measured at cost less impairment.

Investments in subsidiaries and associates are measured at cost less impairment. For investments in subsidiaries acquired for consideration including the issue of shares qualifying for merger relief, cost is measured by reference to the nominal value of the shares issued plus fair value of other consideration. Any premium is ignored.

Derivative financial instruments

The charity uses derivative financial instruments to reduce exposure to foreign exchange risk and interest rate movements. The charity does not hold or issue derivative financial instruments for speculative purposes.

Derivatives are initially recognised at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The resulting gain or loss is recognised in statement of financial activities immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in statement of financial activities depends on the nature of the hedge relationship.

Fair value measurement

The best evidence of fair value is a quoted price for an identical asset in an active market. When quoted prices are unavailable, the price of a recent transaction for an identical asset provides evidence of fair value as long as there has not been a significant change in economic circumstances or a significant lapse of time since the transaction took place. If the market is not active and recent transactions of an identical asset on their own are not a good estimate of fair value, the fair value is estimated by using a valuation technique.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

2 Income from donations and legacies

	Unrestricted funds		Total 2015 £
	General £	Total 2016 £	
Donations and legacies;			
Donations from companies, trusts and similar proceeds	10,833	10,833	16,105
Donations from individuals	1,068	1,068	108
	11,901	11,901	16,213

3 Income from charitable activities

	Unrestricted funds		Total 2015 £
	General £	Total 2016 £	
Conferences	151,534	151,534	84,592
Publications	85,291	85,291	92,569
Membership Fees	28,615	28,615	29,693
	265,440	265,440	206,854

4 Investment income

	Unrestricted funds		Total 2015 £
	General £	Total 2016 £	
Other income from fixed asset investments	9,157	9,157	9,335

5 Expenditure on charitable activities

Note	Unrestricted funds		Total 2016 £	Total 2015 £
	General £	Restricted funds £		
Conferences	141,905	-	141,905	98,123
Publications	(24,967)	-	(24,967)	(30,535)
Membership Fees	2,310	-	2,310	2,254
Grant funding of activities	1,306	3,477	4,783	6,747
Staff costs	93,481	-	93,481	90,876
Governance costs	90,510	-	90,510	96,785
	304,545	3,477	308,022	264,250

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

6 Analysis of governance and support costs

Governance costs

	Unrestricted funds		
	General	Total	Total
	£	2016	2015
		£	£
Staff costs			
Wages and salaries	32,106	32,106	33,589
Pension costs	5,296	5,296	10,269
Independent examiner fees			
Examination of the financial statements	2,875	2,875	2,875
Legal fees	835	835	1,152
Marketing and publicity	6,436	6,436	7,043
Depreciation, amortisation and other similar costs	2,670	2,670	1,245
Other governance costs	40,292	40,292	40,612
	90,510	90,510	96,785

7 Net incoming/outgoing resources

Net outgoing resources for the year include:

	2016		2015
	£		£
Depreciation of fixed assets		2,670	1,245

8 Trustees remuneration and expenses

During the year the charity made the following transactions with trustees:

Mr. M May

£627 (2015: £Nil) of expenses were reimbursed to Mr. M May during the year.

Dr. E A Stockdale

£493 (2015: £674) of expenses were reimbursed to Dr. E A Stockdale during the year.

Prof W Davies

£409 (2015: £100) of expenses were reimbursed to Prof W Davies during the year.

Prof. N G Halford

£636 (2015: £612) of expenses were reimbursed to Prof. N G Halford during the year.

Dr. R Kennedy

£329 (2015: £203) of expenses were reimbursed to Dr. R Kennedy during the year.

Dr. M Back

£161 (2015: £287) of expenses were reimbursed to Dr. M Back during the year.

Dr R Carlton

£1,110 (2015: £1,718) of expenses were reimbursed to Dr R Carlton during the year.

Prof C Watson

£991 (2015: £Nil) of expenses were reimbursed to Prof C Watson during the year.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

Mr C R Glass

£Nil (2015: £286) of expenses were reimbursed to Dr. C R Glass during the year.

Dr M Gowda

£Nil (2015: £558) of expenses were reimbursed to Dr M Gowda during the year.

Dr M Finlay Dale

£Nil (2015: £436) of expenses were reimbursed to Dr M Finlay Dale during the year.

No trustees, nor any persons connected with them, have received any remuneration from the charity during the year.

No trustees have received any other benefits from the charity during the year.

9 Staff costs

The aggregate payroll costs were as follows:

	2016 £	2015 £
Staff costs during the year were:		
Wages and salaries	125,587	124,465
Pension costs	5,296	10,269
	130,883	134,734

The monthly average number of persons (including senior management team) employed by the charity during the year expressed as full time equivalents was as follows:

	2016 No	2015 No
Charitable Activities	5	4
Governance	1	1
	6	5

4 (2015 - 4) of the above employees participated in the Defined Contribution Pension Schemes.

Contributions to the employee pension schemes for the year totalled £5,296 (2015 - £10,269).

No employee received emoluments of more than £60,000 during the year

10 Independent examiner's remuneration

	2016 £	2015 £
Examination of the financial statements	2,875	2,875
Independent Examiner's remuneration	2,875	2,875

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

11 Taxation

The charity is a registered charity and is therefore exempt from taxation.

12 Tangible fixed assets

	Furniture and equipment £	Total £
Cost		
At 1 January 2016	59,329	59,329
Additions	7,066	7,066
At 31 December 2016	66,395	66,395
Depreciation		
At 1 January 2016	58,059	58,059
Charge for the year	2,670	2,670
At 31 December 2016	60,729	60,729
Net book value		
At 31 December 2016	5,666	5,666
At 31 December 2015	1,270	1,270
13 Fixed asset investments		
	2016	2015
	£	£
Other investments	386,039	374,830

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

Other investments

	Listed investments £	Total £
Cost or Valuation		
At 1 January 2016	410,730	410,730
Revaluation	41,688	41,688
Additions	39,670	39,670
Disposals	(106,049)	(106,049)
At 31 December 2016	386,039	386,039
Net book value		
At 31 December 2016	386,039	386,039
At 31 December 2015	410,730	410,730

14 Debtors

	2016 £	2015 £
Trade debtors	21,706	68,130
Prepayments	926	1,612
Other debtors	42,410	49,899
	65,042	119,641

15 Creditors: amounts falling due within one year

	2015 £	2015 \$
Trade creditors	2,497	13,845
Other taxation and social security	10,691	6,396
Other creditors	74,459	90,142
Accruals	2,954	9,222
	90,601	119,605

16 Pension and other schemes

Defined contribution pension scheme

The charity operates a defined contribution pension scheme. The pension cost charge for the year represents contributions payable by the charity to the scheme and amounted to £5,296 (2015 - £10,269).

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

17 Funds	Balance at 1 January 2016 £	Incoming resources £	Resources expended £	Other recognised gains/ (losses) £	Balance at 31 December 2016 £
Unrestricted funds					
General	(430,104)	(286,498)	304,545	(41,688)	(453,745)
Restricted funds	(19,856)	-	3,477	-	(16,379)
Total funds	(449,960)	(286,498)	308,022	(41,688)	(470,124)
	Balance at 1 January 2015 £	Incoming resources £	Resources expended £	Other recognised gains/(losses) £	Balance at 31 December 2015 £
Unrestricted funds					
General	(463,799)	(232,402)	263,939	2,154	(430,108)
Restricted funds	(20,167)	-	311	-	(19,856)
Total funds	(483,966)	(232,402)	264,250	2,154	(449,964)
18 Analysis of net assets between funds					
	Unrestricted funds				
	General £	Restricted funds £		Total funds £	
Tangible fixed assets	5,666	-	-	5,666	
Fixed asset investments	386,039	-	-	386,039	
Current assets	152,641	16,379	-	169,020	
Current liabilities	(90,601)	-	-	(90,601)	
Total net assets	453,745	16,379	-	470,124	

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2016

19 Analysis of net funds

	At 1 January 2016 £	Cash flow £	At 31 Decem- ber 2016 £
Cash at bank and in hand	73,828	30,150	103,978
Net debt	73,828	30,150	103,978

PRESIDENT'S REPORT



2016-2017 was a busy year for the AAB with the organisation of the 14th Congress of the European Society for Agronomy (ESA) in Edinburgh. The Scientific Organising Committee drawn from across Europe put together an excellent programme with keynote speakers from the US and Kenya as well as Europe. The weeks leading up to the Congress were challenging with the BREXIT vote in June affecting both morale and exchange rates but we were very pleased with the final congress turnout of 300 delegates. Edinburgh in September was always going to be a gamble weather-wise but the sun shone and the evening events programme was memorable. I don't think any of the delegates will forget the pipe band marching into the conference dinner in the National Museum of Scotland. I am very grateful to the AAB office team and the rest of the organising committee and student helpers for doing a great job. We were joined at the Congress by Richard Whiston who has now joined us permanently in the Office.

Alongside the ESA Congress there were a number of other successful meetings and conferences including the first meeting of the new Soil Biology Group ably led by Matthew Shepherd of Natural England. We are also delighted to welcome Guy Barker from the University of Warwick as convenor of the Plant Physiology and Crop Improvement Group, and Wendy Russell of the Rowett Research Institute as convenor of the Food Systems Group. This group is planning an exciting meeting around the diet and health agenda in 2018.

Our three journals continue to do well with *Food and Energy` Security* finally achieving an Impact Factor. These journals would not succeed without the hard work and enthusiasm of the editors, editorial staff and the reviewers who maintain very high standards. We welcome members of the Association as reviewers if anyone wants to volunteer!

Council has spent considerable time this year thinking about the future of the organisation and how we can do more for early career researchers. We plan to appoint an early career researcher to Council in the near future and are actively encouraging early career researchers to get involved in the organisation of specialist groups. We will also be organising poster competitions for early career researchers, including postgraduate students, at a number of future conferences.

In the office we are currently advertising for an office manager to support the team and allow us to further enhance our conference programme taking advantages of new links with other societies/organisations. I am very grateful to the entire team for all their hard work and enthusiasm. We are delighted to announce that we will be appointing a new Treasurer at the AGM and I want to take this opportunity to thank the current treasurer Mike May for doing an amazing job for AAB and wish him all the best for the future. We are currently looking to appoint a new General Secretary to replace Elizabeth Stockdale who has kept us all on the straight and narrow for the last ten years. Stuart Knight has joined us in the role of President Elect and his enthusiasm for the work of the Association is already helping drive the Association forward. I am very much looking forward to working with Stuart, Council and the office team over the next year.

Christine Watson, Aberdeen,
September 2017

REPORT OF ACTIVITIES

MEMBERSHIP

A total of 111 new members of the Association were elected by Council during the year (see Appendix 2). The total of fully paid-up members and Honorary members on 31st December 2016 was 645 - 56 less than the year before. The number of Honorary members at the end of the year was 14, 15 being the maximum permissible under the Laws.

Student Travel Grants Awarded during 2016

Name	Conference	Award
P Skolik	Exploiting novel sensors for detecting abiotic and biotic stress in crops	£72.00
E Becker	Exploiting novel sensors for detecting abiotic and biotic stress in crops	£205.26
E Poimenopoulou	Advances in virology	£100.00
S Strachan	Advances in nematology	£115.09
Total Student Travel Grants awarded 2016		£492.35

PUBLICATIONS

Publications of Association of Applied Biology represent a major part of the charitable activity of the Association. However the Association also produces a great many conference proceedings under the title *Aspects of Applied Biology*. This form of publication represents a great resource in plant science research and contributes significantly to the Associations work. The scientific publishing area has been under great change with the move towards open access of peer reviewed information. This is largely being driven by government policies and the Associations Journals continue to develop, with these changes underway in the background. The *Plant Biotechnology Journal* has moved to full open access and the new title *Food and Energy Security* is also open access. *Annals of Applied Biology* can accept open access papers. Despite these formidable changes both PBJ and *Annals* contribute substantially to the income of the Association and continue to deliver high quality peer reviewed publications to the scientific community. *Food and Energy Security* has also made huge progress in 2016 with the confirmation that an impact factor will be awarded in 2017.

Annals of Applied Biology

There were six issues of *Annals* published during 2016. The 2016 Impact Factor for *Annals of Applied Biology* achieved an impact of 2.046 which is continuing to enhance the journal. Different library licencing arrangements have been introduced by Wiley for those journals which are not open access. Individual arrangements with libraries for mature journals are being offered as part of a bundle. This may lead to reduced income in established markets but an increase in other markets. Europe and North America are the most important readership areas for the Journal as seen by downloads. Cameron & Mittal (Nitrogen loss from soil and plant systems) was the most downloaded article in 2016 with approximately 1500 downloads. The journal stands at 5th of 57 in the Agriculture & Multidisciplinary area.

Plant Biotechnology Journal

PBJ is fully open access and acceptance of articles was down to 21% in 2016 but had risen to 27 % in Q1 of 2017. The total submissions (original and revised manuscripts) for 2016 ended on 735. Most articles were downloaded in the US (22 %) and China (20 %). The readership of articles increased by 14 % with articles downloaded by over 306 million times by 16000 institutions in over 240 countries. The PBJ impact factor for 2016 was 7.443 which is a fantastic achievement.

Food and Energy Security

The new FES contract between Wiley and the Association was signed in December 2016 which covered a further two year period. In the new agreement Wiley provided funding for the development fund associated with FES. It is essential that FES obtain an impact factor as soon as possible. The recent announcement by Thompson that one will be awarded was welcome news. This means that Wiley will continue to invest in the FES brand. FES has enough contributions to produce 4 issues this year which should help secure the impact factor. The initial impact factor has just been awarded as 2.286 which is a very good starting point and should help make FES sustainable in the longer term.

Aspects of Applied Biology

The following volumes of *Aspects of Applied Biology* were published in 2016:

- No. 132 International Advances in Pesticide Application
No. 133 ESA14: Growing Landscapes - Cultivating innovative agricultural systems

Descriptions of Plant Viruses

Descriptions of Plant Viruses is published as a CD Rom and online. This is an invaluable information tool for all those involved with the identification of plant viruses, including students, teachers and researchers. It is unique in the breadth of the information that it covers.

Newsletter

Due to staff shortages, no Newsletters were published in 2016. It had been agreed in 2017 to produce an online version of the Newsletter in 2017.

SCIENTIFIC CONFERENCES

A total of 720 delegates attended the conferences in 2016 compared with 527 in 2015, 891 in 2014 and 685 in 2013.

The average number of paying delegates was 91 in 2016 compared with 40 in 2015, 62 in 2014 and 62 in 2013. Details of the full scientific conference programme for 2016 are given below:

Title of Conference	Date	No. of delegates	Group
International Advances in Pesticide Application	13-15 Jan	107	Pesticide Application
Wheat – Genetic Improvement of end use quality	9-10 Feb	46	Plant Physiology & Crop Improvement
Exploiting novel sensors for detecting abiotic and biotic stress in crops	27-28 Jun	58	Plant Physiology & Crop Improvement
ESA 14 - Growing Landscapes - Cultivating innovative agricultural systems	5-9 Sep	256	Multidisciplinary with European Society of Agronomy
Advances in Plant Virology	7-9 Sep	114	Virology with Cost Action FA1407
Advances in IPM 2016	16-17 Nov	81	Biocontrol & IPM
Advances in Nematology 2016	13 Dec	58	Nematology
	TOTAL	720	

AAB SPECIALIST GROUP REPORTS

Applied Mycology & Bacteriology

Convener: Tim Pettitt

Group members – Neal Evans, Neil Havis, David Kenyon, Caroline Orr, Keith Thomas

The applied mycology & bacteriology held no conferences in 2016, and no group meetings. The group is planning a precision agriculture conference for 2017.

Biological Control & Integrated Pest Management

Convener: Toby Bruce

Group members – Dave Chandler, Rosemary Collier, Dick Shaw, Paul Sopp, Phil Walker, Keith Walters and Xiaming Xu

The Biocontrol & IPM group held a group meeting on 16 November 2016. We discussed the implications of Brexit on crop protection regulation. This seems to have created uncertainty but could be an opportunity for implementation of more evidence based approaches and streamlining the regulatory system so that novel crop protection products, including biological alternatives to conventional pesticides, could be fast tracked. However, the UK market may not be of sufficient size for companies to develop products for a separate regulatory system and the EU is the most important export market for UK agricultural produce. In the short term, it appears that the UK will do a “cut and paste” of existing EU legislation. We should highlight that expertise is available at the AAB for advice to policymakers on regulation of crop protection and innovation in crop protection.

The group visited RHS Wisley to discuss collaboration. The RHS is developing scientific advice for gardeners and is conducting experiments in the gardens at Wisley.

The Advances in IPM conference was held at the Ramada Resort, Marston, Lincs on 16-17 November 2016. It was well attended as usual with 81 delegates attending. After the conference, Rob Jacobson announced that he would be standing down from the group. We were sorry to see him go and are very grateful to him for his many years of successful conference organisation as well as his expertise in practical IPM.

The 2017 IPM conference is being planned by Toby Bruce and Keith Walters. It has the theme, “Reinventing agriculture to reduce dependency on pesticides”. Reducing dependency on pesticides is a huge challenge and will require the best science and the best translation of that science. The government Industrial Strategy must include help for the agricultural sector as it strives to maintain competitive farming, post Brexit, in an economic environment where growers will be even less able to afford major crop losses to pests, weeds and diseases. Over the last decade, the AAB’s conferences covering advances in biocontrol, IPM and biopesticides have become firm fixtures on the UK’s calendar of events. The overall objective has been to create an annual gathering of the UK IPM community at which policy makers, experienced researchers, young scientists and practitioners can detach themselves from their usual day-to-day pressures and become totally immersed in this important subject.

Cropping and the Environment

Convener – Rob Carlton

Group members – Andy Evans, Naomi Jones, Shamal Mohammed, John Purslow, Kate Smith, David Stock, Elizabeth Stockdale, and Kairsty Topp

Jon Storkey left the group due to increasing workload – we wish him well.

2016 was a quiet year for CATE as most AAB resources were focused on the ESA/AAB/SAC International conference held in Edinburgh in September. CATE was involved in the planning of this conference, being represented by Elizabeth Stockdale and Kairsty Topp.

Planned future conferences: Sustainable Intensification, Rothamsted, 28-30 November 2017; Rethinking Agricultural Systems in the UK: Linking Brexit and Agri-science, London, 30 January 2018; Advances in Legume Science and Practice, Glasgow, 21-22 March 2018; Ecosystem and Habitat Management: Research, Policy and Practice, Worcester, 28-30 March 2018; Soil Improvement: Impact of Management Practices on

Soil Function and Quality (organised in collaboration with the Soil Biology group), Loddington, 22-23 May 2018; The Environment, Farming, Food and Dietary Health (organised in collaboration with the Food Systems group), Edinburgh, September 2018.

Food Systems

Convener: Wendy Russell

Group members – Julia Cooper, Susan Duthie and Bryan Hanley

Wendy Russell was confirmed at the September 2016 AGM as the new Convener for this group. The group is planning a 3-day conference in September 2018.

Nematology Group

Convener – Matthew Back (Harper Adams University)

Group members – Steve Edgington (CABI), Ivan Grove (Harper Adams University), Rosa Manzanilla-Lopez (Private Consultant), Barbara Pembroke (University of Reading), Jon Pickup (SASA), Tom Prior (Fera), Wim Wesemael (University of Ghent), Lindy Holden-Dye (University of Southampton), Grace Hoysted (University of Leeds)

The Nematology Group consists of a diverse set of representatives from Government, academia, and private consultancy. We have a good connection to European nematologists through Wim Wesemael and to the Organisation of Nematologists of Tropical America (ONTA) through Rosa Manzanilla-López. The group meets twice a year, with the AGM held at the ‘Advances in Nematology’ meeting in London in December. Our autumn meeting is used to discuss and plan forthcoming conferences as well as other wider nematology related initiatives.

Conferences arranged during 2016

Advances in Nematology, 13th December 2016, London Linnean Society, Piccadilly, London

This conference is an annual one day event held at ‘The Linnean Society of London’, one of five learned societies built around the courtyard of Burlington House, located in Piccadilly. The conference provides an excellent opportunity for networking with UK and international nematologists. Invited contributions are welcomed from all areas of nematology (biology, ecology, epidemiology, management of plant parasitic nematodes, entomopathogenic nematodes and diagnostic methods).

This year 59 delegates attended (equivalent to 2015) from a range of countries including the UK, Belgium, France, Georgia and the USA. Delegates have a variety of interests and experience, and range from early career researchers (PhD students) to established experts. The atmosphere at these meetings is always congenial and the 2016 meeting was no different. Many PhD researchers give their first presentation at this meeting and this year 5 platform and 9 poster presentations were delivered by students.

The scientific content of the conference was excellent covering topics on taxonomy, behaviour, plant resistance, diagnostics and novel crop protection techniques. There were two invited speakers. Eric Grenier (INRA, France) provided a useful review of resistance in relation to populations of potato cyst nematodes while Birgitta Olofsson (University of Cambridge) gave us a fascinating insight into the feeding behaviour of *C. elegans*.

Due to the number of offered papers, the posters were split over two sessions (lunch and tea break). This allowed delegates more time to view posters and speak with individual presenters. In order to give the delegates a preview into the content of the posters, the presenters were given the opportunity to deliver a one minute synopsis of their poster to the delegates.

Lunch and tea break was held in the historic library of the Linnean Society, which has many cabinets housing various leather bound volumes on plant and animal classification; a fitting shrine to the work and collections of Carl Linnaeus.

The day ended on a high note with the Brian Kerry Prizes for the best student platform and poster presentations. These awards are made in memory of the late Professor Brian Kerry, a senior nematologist based at Rothamsted Research. This year the best platform prize was awarded to Christopher Bell (University of Leeds) and the

poster prize to Monika Kudelska (University of Southampton).

The Nematology Group looks forward to welcoming delegates to the next meeting in December 2017.

Future Conference Programme

3rd International Symposium on Nematodes as Environmental Bioindicators, 28-29 June 2017, Institute of Technology, Carlow, Ireland

Advances in Nematology, 12 December 2017: Linnean Society, Piccadilly, London

Pesticide Application

Convener – Tom Robinson

Group members – Paolo Balsari, Simon Cooper, Richard Glass, Ben Magri, Paul Miller, Colin Mountford-Smith, David Nuyttens, Andrew Shaw and Jan van de Zande. Co-opted member – Emilio Gil.

The 2016 AAB International Advances in Pesticide Application Conference, held at the Universitat Politècnica de Catalunya, Barcelona, Spain 13-15th January 2016 was attended by 103 delegates from 19 countries. Each day began with an invited speaker. The first was given by Manuel Lainez who gave an overview of Spanish agriculture and the role of the National Institute for Agricultural and Food Research and Technology (INIA) implementing the EU Regulations 1107/2009 and 369/2005. On Day 2, Dr M De La Fuente of the International Organisation of Vine and Wine (IOV) presented an account of the organisation's work regarding the use of pesticides in viticulture and actions by the PROTEC group in reducing the use of pesticides, referring to the need to harmonise MRLs for grapes and wine. The third invited speaker was Karin M Nienstedt of the EU DG Sante in Brussels, who was most concerned about the role of training and information on food safety with use of plant protection products (PPPs) to ensure the implementation of new regulations throughout the three zones in Europe.

The conference was divided into 7 sessions, all of which included some reference to requirements to meet the EU Regulation 1107/2009, with the presentation of 37 multi-author papers and 5 minute oral presentations of 18 posters. The first session on sprayer performance included papers on automatic spray boom height control systems, the use of airblast sprayers in orchard crops, sprayer tank cleaning and an outlook for the use of remotely piloted aircraft (RPA), previously referred to as unmanned aerial vehicles (UAV), a topic covered later with reference to spraying rice in China. The next session was on operator training and the Sustainable Use Directive (SUD). This session included an account by Renata Pollini of the website www.pesticide-wise.com developed by Syngenta to assist those using knapsack sprayers on how to apply pesticides safely on different crops. The extent to which this will help small-scale users in developing countries will depend on access to high-speed internet connections and support from local distributors who will need more detailed training on nozzle selection and other factors to ensure farmers get adequate back-up. The first day ended with a session on spray deposition and biological efficacy. Perhaps the most intriguing paper in this session was by Jerzy Zabkiewics from New Zealand, who reported the development of virtual plant-visual spray retention models. The effect of different size droplets within a spray was clear with some larger droplets bouncing off a leaf or shattering into smaller droplets.

In the Precision application session, the theme was to adjust application in real time. Two designs of rain drop sensors were used to detect spray droplets to estimate coverage in apple orchards and vineyards and compared with using water sensitive cards, but with large errors between the methods, further work is needed with coverage estimated with a tracer dye. Sensors were also examined when spraying cyclamen plants in pots and tomato plants in a greenhouse in Holland but spray volume(s) applied were high with the different sprayers used, although the Crop Adapted Sprayer (CAS) with sensors enabled a lower volume of spray to be applied and reduced spray deposition on the floor and walls of the glasshouse. In another presentation, it was shown that moving ornamental pot plants on a conveyor through an enclosed spray chamber in which some nozzles sprayed laterally upwards gave better deposition than manually held spray lances.

In session 5 on reducing off-target exposure, a conceptual framework for risk reduction that covered all stages needed in a spray programme from the planning stage to achieve good biological efficacy was described indicating the importance of attention not only to the selection of nozzles, but the preparation of sprays and cleaning equipment afterwards. Other papers reported an improved closed transfer system ('easyFlow') to ensure negligible operator exposure, measurements of spray drift, using LIDAR and industry perspectives on

regulatory aspects of drift management in Europe. The output of a study on the problem of dust from treatment of seeds with insecticides during drilling was presented together with a data on computational fluid dynamics (CFD) modelling to simulate dust emissions from pneumatic drills.

Session 6 on spray physics and nozzles included measurements of droplets in orchards sprayers equipped with pneumatic nozzles in which a high velocity air stream is used to shear the spray liquid into droplets, the development of a new device to count and measure spray droplet under field conditions and using a multiphase CFD model to study droplets impaction of various leaf surfaces. CFD was also in Session 7 on spraying tree and bush crops to study the behaviour of air assisted sprays applied in citrus. Other topics in this session discussed developments of a spray drift model for fruit orchards, a database for access to the various sets of data on spray drift in apple orchards, the use of multiple row sprayers in orchards and the assessment of using fixed spray lines in an apple orchard with short stature trees with a narrow canopy.

The Conference was well organised by Professor Emilio Gil and his team and provided the usual update of current research on pesticide application and although there were no major developments of new technology, the trend to reduce spray drift and ensure applications are more effective to meet the demands of new legislation were uppermost in the programme. Delegates were able to see the posters and some exhibits during the coffee breaks. The Proceedings of the Conference are published as Aspects of Applied Biology 132, available from the Association of Applied Biologists.

Apart from the scientific content, delegates were given a conducted tour of the Hospital de Sant Pau, built as a 'City within a City' from 1902 to 1930 in the centre of Barcelona. It was declared a World Heritage Site by UNESCO in 1997 and the magnificent buildings are now the Art Nouveau Site since February 2014.

The two main activities of the Group during the coming year will be centred on the preparation and execution of the Practical Spray Drift Management Workshop to be held at Rothamsted on 5 April 2017 the ongoing organisation of the International Advances in Pesticide Application (IAPA) to be held at the Hotel Mercure in Brighton January 9-11 2018. Also, a one day workshop on Dose Expression is planned to be held in Autumn 2018.

Plant Physiology & Crop Improvement

Convener – Guy Barker

Group members – Simon Griffiths, Nigel Halford, Jim Monaghan and Erik Murchie

The chairmanship of the panel passed this year from Finlay Dale to Guy Barker. The group would like to thank Finlay for his work over the years and his effort has been much appreciated.

During 2016 conferences were held at Rothamsted Research on 9-10 February entitled: "*Wheat – genetic improvement of end use quality*" which attracted 46 delegates, and on 27-28 June at the University of Nottingham's Sutton Bonington campus entitled: "*Exploiting Novel Sensors for Detecting Abiotic & Biotic Stress in Crops*" which attracted 57 delegates.

The group met in May to discuss plans for the coming year with another two exciting conferences to look forward to.

Soil Biology Group

Convener – Matthew Shepherd

Group members – Anna Campbell, Lea Carlesso, Felicity Crotty, Richard Gantlett, Phil Murray, Olaf Schmidt, and Peter Shaw

This group was launched at the September 2016 AGM. They will be holding their first group meeting at the Soil Improvement conference to be held on 20 April 2017 at Rothamsted Research. They are hoping to hold a conference in April 2018.

Virology Group

Convener – Maruthi Gowda

Group members – Gerard Clover, Andrew Love, Charlotte Nellist, Antonio Olmos, Jens Tilsner, Trisna Tungadi, John Walsh

The Virology group organised the International Advances in Virology conference on 7–9 September 2016, in conjunction with COST Action FA1407 at the University of Greenwich in London. The meeting was well attended by 130 delegates from 28 countries who delivered 53 platform and 46 poster presentations. The meeting also included three keynote presentations on ‘*Plant-virus interactions*’ by Michael Taliansky (The James Hutton Institute, Dundee, UK), ‘*Plant resistance to viruses*’ by Sylvie German-Retana (INRA, Bordeaux, France) and ‘*Virus replication*’ by Peter Nagy (University of Kentucky, USA). The next conference is planned for 11–13 April 2018 in conjunction with the Microbiology Society in Birmingham.

WEBSITE

The AAB website is now looking out-dated, so we are currently working on a new design website to give a more modern look to this.

DONATIONS AND SPONSORSHIP

The Trustees would like to extend their grateful thanks to the following organisations/individuals that provided financial donations or sponsorship total, together with further support during the year.

AHDB	£750	IPM: The 10 year plan
Albuz	£720	International Advances in Pesticide Application
Anonymous Donation	£1000	General Donation
BASF	£750	IPM: The 10 year plan
Bayer Crop Science	£720	International Advances in Pesticide Application
BCP Certis	£750	IPM: The 10 year plan
BES Agriculture Group	£1000	ESA14
Biobest	£250	IPM: The 10 year plan
Bionema	£500	IPM: The 10 year plan
British Society for Plant Pathology	£1500	Exploiting Novel Sensors for Detecting Abiotic & Biotic Stress in Crops
COST Action A 1407	£5750	Advances in Plant Virology
Fargro	£750	IPM: The 10 year plan
Fede	£720	International Advances in Pesticide Application
Food and Energy Security Journal (AAB/WB)	£1000	ESA14
Koppert	£750	IPM: The 10 year plan
Landini	£720	International Advances in Pesticide Application
Russell IPM	£750	IPM: The 10 year plan
Spray Systems	£720	International Advances in Pesticide Application
Syngenta	£720	International Advances in Pesticide Application
Teejet	£720	International Advances in Pesticide Application
TOTAL	£20540	

AFFILIATIONS TO OTHER SOCIETIES

Affiliations were maintained with the Society of Biology, the Foundation for Science and Technology and the Association of Learned and Professional Society Publishers. The Association has a Memorandum of Understanding with the European Society for Agronomy.

SPECIALIST GROUP COMMITTEES AS AT SEPTEMBER 2017

Applied Mycology and Bacteriology:

T Pettitt (Convener) (2018 1st term)
N Evans (2018)
N Havis (2018)
D Kenyon (2018)
C Orr (2019)
K Thomas (2018)

Biological Control:

T Bruce (Convener) (2020 2nd term)
D Chandler (2018)
R Collier (2019)
R Shaw (2018)
P Sopp (2019)
P Walker (2018)
K Walters (2016)
X Xu (2020)

Cropping and the Environment:

R Carlton (Convener) (2019 2nd term)
K A Evans (2018)
Shamal Mohamed (2020)
N Jones (2019)
J Purslow (2018)
K Smith (2018)
D Stock (2018)
E Stockdale (2019)
K Topp (2018)

Food Systems

W Russell (Convener) (2018 1st term)
J Cooper (2019)
S Duthie (2019)
B Hanley (2019)

Nematology:

M Back (Convener) (2019 2nd term)
S Edgington (2018)
I Grove (2018)
L Holden-Dye (2018)
G Hoysted (2018)
R Manzanilla-Lopez (2018)
B Pembroke (2018)
J Pickup (2018)
T Prior (2018)
W Wesemael (2018)

Pesticide Application:

T H Robinson (Convener) (2019 1st term)
P Balsari (2018)
S E Cooper (2018)
C R Glass (2018)
B Magri (2018)
P Miller (2019)
C Mountford-Smith (2019)
D Nuyttens (2020)
A Shaw (2019)
J van de Zande (2018)

Plant Physiology and Crop Improvement:

G Barker (Convener) (2019 1st term)
S Griffiths (2020)
N Halford (2018)
J Monaghan (2020)

Soil Biology:

M Shepherd (Convener) (2019 1st term)
A Campbell (2019)
L Carlesso (2019)
F Crotty (2019)
R Gantlett (2019)
P Murray (2019)
O Schmidt
P Shaw

Virology:

Maruthi Gowda (Convener) (2019 2nd term)
Gerard Clover (2020)
A Love (2019)
Charlotte Nellist (2019)
A Olmos (2020)
J Tilsner (2019)
T Tungadi (2019)
John Walsh (2018)

ELECTION TO SPECIALIST GROUP COMMITTEES FOR 2017

Nominations are sought for vacancies on some of the AAB Specialist Group Committees. The present composition of each Group Committee can be seen overleaf. The nominations, duly seconded and accompanied by the consent of the nominees, should be sent to the Executive Officer, Carol Millman, at the AAB Office to arrive not later than 14th November 2017.

**ASSOCIATION OF APPLIED BIOLOGISTS
(This form may be photocopied)**

We wish to nominate Mr/Mrs/Miss/Ms/Dr/Professor*

.....

for the committee ofGroup

Proposed by

Seconded by

Signed

Signed

Address

Address

.....

.....

.....

.....

.....

.....

***Delete as appropriate**

Consent to nomination

I agree to the nomination for the committee of

Signed

Address

.....

..... **Date**

AAB

FORWARD CONFERENCE PROGRAMME

2017

- 25-26 September **Advances in IPM 2017: Reinventing agriculture to reduce dependency on pesticides**
Harper Adams University, Newport, Shropshire (Biocontrol Group)
- 26-27 October **Precision systems in agricultural and horticultural production**
Pershore College, Pershore, Worcs, UK (AM & B Group)
- 28-30 November **Sustainable Intensification**
Rothamsted Research, Harpenden, UK (CATE Group, Defra, SIP)
- 11-12 December **Quality Traits in Leafy Crops**
The Holiday Inn, Peterborough, UK, (PP&CI Group)
- 12 December **Advances in Nematology**
Linnean Society of London, Piccadilly, London, UK
(Nematology Group)

2018

- 9-11 January **International Advances in Pesticide Application**
Mercure Brighton Seafront Hotel, Brighton, Sussex, UK
(Pesticide Application Group)
- 30 January **Brexit: Rethinking British Agricultural Systems**
Society of Chemical Industry, Belgrave, London, UK (CATE Group/SCI/BES/AES)
- 21-22 March **Advances in Legume Science and Practice**
Jury's Inn, Glasgow, UK (CATE Group/BES/TRUE Project)
- 27-28 March **Ecosystem and Habitat Management: Research, Policy, Practice**
University of Worcester, Henwick Grove, Worcester, UK (CATE Group)
- 12-13 April **Advances in Plant Virology**
Jury's Inn, Birmingham, UK (Virology Group)
- 22-23 May **Soil Improvement: Impact of Management Practices on Soil Function and Quality**
The Game & Wildlife Trust, Loddington, Leics, UK (CATE/Soil Biology Groups)

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