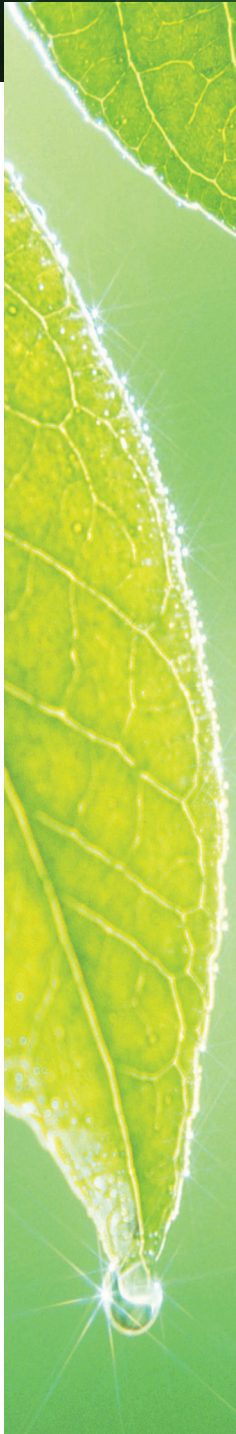




AAB President: Stuart Knight



ASSOCIATION OF APPLIED BIOLOGISTS

**REPORT OF THE TRUSTEES
& FINANCIAL STATEMENTS
FOR 2018**

**NOTICE OF
ANNUAL GENERAL MEETING**

10 SEPTEMBER 2019

More details are given in the members' voting papers

Other Honorary Officers for 2019, to note:

President – Mr Stuart Knight (serving in this term 2019–2020)

President-Elect – Prof. Christine Foyer (serving in this term 2019–2020)

Honorary Treasurer – Mr Andy Page (serving 1st term 2018–2020)

General Secretary – Prof. Martin Parry (serving 1st term 2018–2020)

Programme Secretary – Dr Robert Carlton (serving 1st term 2019–2021)

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 2019; to note:

Applied Mycology and Bacteriology – Dr Rumiana Ray

Biological Control and IPM – Dr Keith Walters

Cropping and the Environment – Dr Kairsty Topp

Food Systems – Vacancy - nominations please, to Carol Millman (Carol@aab.org.uk)

Nematology – Dr Matthew Back

Pesticide Application – Mr Tom Robinson

Plant Physiology and Crop Improvement – Dr Guy Barker

Soil Biology – Dr Matthew Shepherd

Virology – Dr Miguel Aranda

Early-Career Scientist Champion - Dr Felicity Crotty (serving 1 term 2017-2020 to coincide with term served by President-Elect, then President)

8) **Update to AAB strategic plan**

9) **Appointment of new General Secretary, and additional Early-Career Scientist Champion and re-election of Publications Officer, Conference Treasurer and 1st Early-Career Scientist Champion**

Nominations received to date:

General Secretary:

Dr Guy Barker

Publications Officer

Dr Roy Kennedy (3rd term)

Prof. Martin A J Parry

Conference Treasurer

Mr Richard Glass (3rd term)

1st Early-Career Scientist Champion:

Dr Felicity Crotty (2nd term)

2nd Early-Career Scientist Champion:

Dr Philippa Borrill

10) **Election of new Honorary Members - proposed new Honorary Members - Drs Carol Duffus and Elizabeth Stockdale**

11) **Proposed changes in the AAB Laws**

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

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

Rothamsted Research Harpenden, Herts AL5 2JQ

Wednesday 26th September 2018

The meeting commenced at 12.30

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

24 members were present, 14 apologies had been received.

The President reminded members that the AAB annual report had been made accessible to all members before the AGM and hence except where members indicated, therefore assumed that members had read this carefully.

1) **Minutes of AGM held on 26th September 2017 Harper Adams**

The minutes of the last meeting were provided, the meeting agreed that the minutes were a correct record of the meeting and were therefore signed by the president.

2) **Trustee Activity Report**

The Trustee's report had been provided. The President noted two highlights of the year, the success of the Sustainable Intensification Conference and securing an impact factor for the Association's newest journal, Food and Energy Security Journal, she also thanked Council and the office staff for their support. The President invited questions on the report but none were forthcoming. The President therefore asked if the report of the trustees (including the Specialist Group Reports) could be accepted for publication as a full and complete report of the Association in 2017.

Proposed by Guy Barker

Seconded by Nigel Halford

3) **Financial Report**

The Treasurer referred to the finance report available to members and outlined the key aspects of performance for 2017. Operating cash flow was positive at £23568 driven by a strong performance from publications. This offset higher governance costs and lower conference attendance and income. Unrealised gains on investments yielded £26862, resulting in total income of £50430 for the year. Conference programmes will continue to be monitored to ensure that resources devoted to this activity are used effectively.

For 2018, a small cash inflow is anticipated from all operations with current projections a little short of that. The Treasurer asked if the 2017 Finance report presented by the Trustees after audit by Clere's of Birmingham could be accepted for publication.

Proposed by Guy Barker

Seconded by Kirsty Topp

4) **Appointment of Auditors**

Council proposed the appointment of Clere's of Birmingham as auditors in 2019 for the 2018 account. The proposal was accepted unanimously

5) **Membership Fees**

The Council proposed that the membership fees for 2019 remain the same but with a discounted rate for students in their first year of membership. The proposed rates were:

Ordinary £60

Retired £30

Student £5 in first year £20 in subsequent years providing the student signed up using a direct debit form

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

6) **Subscription for *Annals of Applied Biology***

The Council proposed that the membership fees for 2019 were increased to:

Print only £87.64

On-line only £75.55

Print and On-line £114.50

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

7) **Honorary Officers**

There were two nominations for President-Elect, Professor George Lomonossoff and Professor Christine Foyer. Both had introduced themselves via a short personal statement, a ballot was held and resulted in the election of Christine Foyer.

There were two nominations for Programme Secretary, Dr Guy Barker and Dr Robert Carlton. Both had introduced themselves via a short personal statement, a ballot was held and resulted in the election of Rob Carlton

Council requested permission to create a position on Council for a second early career member. This was needed to encourage greater involvement and participation by people at the start of their career, to widen the early career network and support the existing early career member. The proposal was accepted unanimously.

The Chair noted other Honorary Officers for 2019 as follows:

President – Mr Stuart Knight

General Secretary – Prof. Martin Parry

Publications Officer – Dr Roy Kennedy

Meetings Treasurer - Dr Richard Glass

Early Career Scientist Champion – Dr Felicity Crotty

Members should note that there will be an opportunity to stand as Publication Officer and Meeting Treasurer at the next AGM.

The chair also noted the convenors of Specialist Groups as selected by the groups for 2019

Applied Mycology and Bacteriology – Dr T Pettit

Biological Control and IPM – Prof. Toby Bruce

Cropping and the Environment – Dr Robert Carlton

Food Systems – Dr Wendy Russell

Nematology – Dr Matthew Black

Pesticide Applications – Mr Tom Robinson

Plant Physiology and Improvement – Dr Guy Barker

Soil Biology – Dr Matthew Shepherd

Virology - Dr Miguel Aranda

8) **Any Other Issues raised by the members**

There was a brief discussion of how the association could forge links with other complementary associations to raise the reach and impact of the Association.

The annual report was approved by the members of the charity on 10 September 2019 and signed on its behalf by:

.....

Trustee

FINANCE REPORT 2018

ACHIEVEMENT AND PERFORMANCE 2018

Charitable activities

Income and expenditure

The Association continues with the long-term aim of operating with a small positive cash flow, or cash neutral, as part of a sustainable Business Plan.

Operating income in 2018 was however exceeded by expenditure by £7808, an adverse performance compared to the surplus of £23568 in 2017.

Unrealised losses on investments in 2018 reversed the trend of 2017, showing a net loss of £32734. This reflects poor stock market performances during the last 3 months of 2018, which have been largely reversed so far in 2019.

Therefore, the total deficit for the year was £40542 (2017: surplus £20164)

Despite the significant market developments in scientific publishing during 2018, AAB publications performed creditably with all titles showing solid performances. PBJ matched the strong performance of 2017 closing with income of £56005. Food and Energy Security, in its sixth year of publication, moved into a small profit and achieved an impact factor of 4.8. *Annals* also showed consistency of performance with an income of £80524 (2017: £87298). Contractual arrangements for *Annals* with Wiley, our publishers, are being renegotiated.

Both *Annals*'s and PBJ's income were affected by the weakness of sterling, reducing the pound value of dollar based subscriptions.

Governance costs were flat at £120147.

The conference programme generated a loss of £50914, higher than both the 2017 loss (£26691) and the budgeted £27,000 shortfall. Two conferences were cancelled in the year and two deferred to 2019. With the odd exception, most individual conferences performed less well financially than expected. This issue continues to be one that the Trustees are giving significant focus to.

Investment returns (reinvested) declined slightly reflecting market conditions during 2018.

The Trustees took the decision during 2018 to move the management of its investment portfolio from Lloyds Bank to Tilney Investment Management. The funds were transferred in early June 2019. The Trustees have agreed a strategy with Tilney that they believe strikes a good balance between risk and return.

Balance Sheet

The Association's net assets decreased in 2018 by £40542 due to the £32734 of unrealised investment fund losses together with the cash deficit on activities of £7808.

Discussions with Wiley Publishers during the year have resulted in higher advance payments in 2019 for both PBJ and *Annals* which will assist cash flow and net assets in 2019.

Future Plans and Forecasts

The 2019 budget foresees a small deficit of around £7500 and within this the Association has set out some modest cost targets to reduce central office costs. Currently, trends are for a loss modestly higher than this. Lower conference activity plus the additional costs of the office move, associated legal costs and the new lease, all contribute to this.

A rolling cash flow forecast for the next 15 months has been established and regular 13-week cash forecasts ensure that short term cash needs are monitored closely.

The decline in membership and membership income is a concern and one that the Trustees are looking to address.

The Trustees will also be examining forward financial projections for the AAB for the coming years to ensure that the right decisions are made to sustain its financial health and relevance. In particular, the impact of 'Plan S' will need to be accommodated within the AAB's strategy.

Proposed Membership Fees

The Trustees wish to raise membership numbers and at present this is not being achieved. In particular, a younger generation of members is needed for the health of the Association. Actions continue to be planned for and taken with this aim.

However, with rising costs, subscription fees are to be increased by 3% for the coming year (£62 for full members; £31 for concessions). A special low joining fee introduced for new student members last year will continue.

Annals will be published online only from 2020, with online subscriptions frozen for 2020. However, members will be able to obtain print on demand copies of *Annals* for a couple more years.

For the print on demand option, AAB members will receive a 90% global discount of the institutional list price. The current rate for members based in the UK would be around £82 per print subscription. The current global rates below (all in USD) will apply to *Annals*.

Member Direct	Americas	UK	Europe	Rest of World
POD Price (USD)	\$142.15	\$104.77	\$121.76	\$166.15

The Association of Applied Biologists

Annual Report and Financial Statements

for the Year Ended 31 December 2018

The Association of Applied Biologists

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Notes to the Financial Statements	13 to 24

The Association of Applied Biologists

Reference and Administrative Details

Executive Officer

Mrs C A Millman

Trustees

Dr. E A Stockdale, General Secretary (resigned 1 January 2018)
Mr. C R Glass, Conferences Treasurer
Prof. N G Halford, Programme Secretary
Dr. T Bruce, Biological Control
Dr R Carlton, Cropping & the environment
Dr. R Kennedy, Publications Officer
Mr. M May, General Treasurer (resigned 1 January 2018)
Dr. M Back, Nematology
Prof C Watson, President
Dr M Gowda, Virology (resigned 1 March 2018)
Mr T Pettitt, Applied mycology & bacteriology
Dr M J Shepherd, Soil biology
Dr W Russell, Food systems
Dr G Barker, Plant physiology & crop improvements
Mr S Knight, President Elect
Mr M Aranda, Virology (appointed 1 March 2018)
Mr T Robinson, Pesticide Application
Dr F Crotty, Early Career Scientist Champion
Mr A Page, General Treasurer (appointed 1 January 2018)
Prof. M Parry, General Secretary (appointed 1 January 2018)

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

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
65 Church Street
Birmingham
B3 2DP

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 2018.

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.

The Association of Applied Biologists

Trustees' Report

Achievements and performance

Income and expenditure

The Association continues with the long-term aim of operating with a small positive cash flow, or cash neutral, as part of a sustainable Business Plan.

Operating income in 2018 was however exceeded by expenditure by £7808, an adverse performance compared to the surplus of £23568 in 2017.

Unrealised losses on investments in 2018 reversed the trend of 2017, showing a net loss of £32734. This reflects poor stock market performances during the last 3 months of 2018, which have been largely reversed so far in 2019. Therefore, the total deficit for the year was £40542 (2017: surplus £50430).

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Discussions with Wiley Publishers during the year have resulted in higher advance payments in 2019 for *Annals* which will assist cash flow and net assets in 2019.

The Association of Applied Biologists

Trustees' Report

Financial review

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 Tilney Investment Management Services Ltd whose performance the trustees review. It is the Association's policy to avoid high risk investments.

Plans for future periods

Aims and key objectives for future periods

Future Plans and Forecasts

The 2019 budget foresees a small deficit of around £7500 and within this the Association has set out some modest cost targets to reduce central office costs. Currently, trends are for a loss modestly higher than this. Lower conference activity plus the additional costs of the office move, associated legal costs and the new lease, all contribute to this.

A rolling cash flow forecast for the next 15 months has been established and regular 13-week cash forecasts ensure that short term cash needs are monitored closely.

The decline in membership and membership income is a concern and one that the Trustees are looking to address.

The Trustees will also be examining forward financial projections for the AAB for the coming years to ensure that the right decisions are made to sustain its financial health and relevance. In particular, the impact of 'Plan S' will need to be accommodated within the AAB's strategy.

The Association of Applied Biologists

Trustees' Report

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 Conference 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 Conveners of the Association's Specialist Groups. The Conveners 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.

Conveners 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 Conveners 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.

The Association of Applied Biologists

Trustees' Report

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, Publications Officer, Membership Officer, Programme Secretary, Meetings Treasurer and Early Career Scientist Champion, together with Conveners 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.

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 investment funds.

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 31 July 2019 and signed on its behalf by:



Prof. M A J Parry

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 31 July 2019 and signed on its behalf by:

A handwritten signature in black ink, appearing to read 'Mat A J Parry', with a horizontal line underneath.

Prof. M A J Parry

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 2018 which are set out on pages 11 to 24.

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 Act
 - have 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

65 Church Street

Birmingham

B3 2DP

Date 30 July 2019

The Association of Applied Biologists

Statement of Financial Activities for the Year Ended 31 December 2018

	Note	Unrestricted funds £	Restricted funds £	Total 2018 £
Income and Endowments from:				
Donations and legacies		6,300	-	6,300
Charitable activities		258,435	-	258,435
Investment income	4	7,813	-	7,813
Total Income		272,548	-	272,548
Expenditure on:				
Charitable activities		(279,532)	(824)	(280,356)
Total Expenditure		(279,532)	(824)	(280,356)
Gains/losses on investment assets		(32,734)	-	(32,734)
Net movement in funds		(39,718)	(824)	(40,542)
Reconciliation of funds				
Total funds brought forward		504,287	16,271	520,558
Total funds carried forward	16	464,569	15,447	480,016
				Total 2017 £
Income and Endowments from:				
Donations and legacies		9,475	-	9,475
Charitable activities		252,354	-	252,354
Investment income	4	8,999	-	8,999
Total Income		270,828	-	270,828
Expenditure on:				
Charitable activities		(247,152)	(108)	(247,260)
Total Expenditure		(247,152)	(108)	(247,260)
Gains/losses on investment assets		26,862	-	26,862
Net movement in funds		50,538	(108)	50,430
Reconciliation of funds				
Total funds brought forward		453,745	16,379	470,124
Total funds carried forward	16	504,283	16,271	520,554

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

The funds breakdown for 2017 is shown in note 16.

The Association of Applied Biologists

(Registration number: 275655)

Balance Sheet as at 31 December 2018

	Note	2018 £	2017 £
Fixed assets			
Tangible assets	11	4,487	4,624
Investments	12	389,269	378,144
		393,756	382,768
Current assets			
Debtors	13	81,941	116,644
Cash at bank and in hand		76,432	142,589
		158,373	259,233
Creditors: Amounts falling due within one year	14	(72,113)	(121,447)
Net current assets		86,260	137,786
Net assets		480,016	520,554
Funds of the charity:			
Restricted funds		15,447	16,271
Unrestricted income funds			
Unrestricted funds		464,569	504,283
Total funds	16	480,016	520,554

The financial statements on pages 11 to 24 were approved by the trustees, and authorised for issue on 31 July 2019



Prof. M A J Parry

Trustee

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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.

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.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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.

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.

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

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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 period.

(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.

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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.

2 Income from donations and legacies

	Unrestricted funds		
	General	Total	Total
	£	2018	2017
		£	£
Donations and legacies;			
Donations from companies, trusts and similar proceeds	6,300	6,300	9,475
	6,300	6,300	9,475

3 Income from charitable activities

	Unrestricted funds		
	General	Total	Total
	£	2018	2017
		£	£
Conferences	95,641	95,641	73,569
Publications	142,245	142,245	152,886
Membership Fees	20,549	20,549	25,899
	258,435	258,435	252,354

4 Investment income

	Unrestricted funds		
	General	Total	Total
	£	2018	2017
		£	£
Other income from fixed asset investments	7,813	7,813	8,999

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

5	Expenditure on charitable activities				
		Unrestricted funds			
		General	Restricted	Total	Total
	Note	£	funds	2018	2017
			£	£	£
	Conferences	146,555	-	146,555	100,260
	Publications	1,234	-	1,234	9,736
	Membership Fees	10,796	-	10,796	12,726
	Grant funding of activities	800	824	1,624	3,476
	Governance costs	120,147	-	120,147	121,062
		<u>279,532</u>	<u>824</u>	<u>280,356</u>	<u>247,260</u>

6	Analysis of governance and support costs				
	Governance costs				
		Unrestricted funds			
		General		Total	Total
		£		2018	2017
				£	£
	Staff costs				
	Wages and salaries		46,867	46,867	37,893
	Pension costs		13,250	13,250	9,751
	Independent examiner fees				
	Examination of the financial statements		2,470	2,470	3,025
	Legal fees		952	952	1,593
	Marketing and publicity		3,998	3,998	5,031
	Depreciation, amortisation and other similar costs		2,623	2,623	2,337
	Other governance costs		49,987	49,987	61,432
			<u>120,147</u>	<u>120,147</u>	<u>121,062</u>

7 **Net incoming/outgoing resources**
 Net (outgoing)/incoming resources for the year include:

	2018	2017
	£	£
Depreciation of fixed assets	<u>2,623</u>	<u>2,337</u>

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

8 Staff costs

	2018 £	2017 £
Staff costs during the year were:		
Wages and salaries	145,460	117,146
Pension costs	13,250	9,750
	158,710	126,896

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:

	2018 No	2017 No
Charitable Activities	4	4
Governance	1	1
	5	5

4 (2017 - 4) of the above employees participated in the Defined Contribution Pension Schemes.

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

9 Independent examiner's remuneration

	2018 £	2017 £
Examination of the financial statements	2,470	3,025
Independent Examiner's remuneration	2,470	3,025

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

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

11 Tangible fixed assets

	Furniture and equipment £	Total £
Cost		
At 1 January 2018	67,692	67,692
Additions	2,485	2,485
At 31 December 2018	70,177	70,177
Depreciation		
At 1 January 2018	63,067	63,067
Charge for the year	2,623	2,623
At 31 December 2018	65,690	65,690
Net book value		
At 31 December 2018	4,487	4,487
At 31 December 2017	4,625	4,625

12 Fixed asset investments

	2018 £	2017 £
Other investments	389,269	378,144

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

12 Other investments

	Listed investments £	Total £
Cost or Valuation		
At 1 January 2018	378,144	378,144
Revaluation	(32,733)	(32,733)
Additions	86,028	86,028
Disposals	(42,170)	(42,170)
At 31 December 2018	389,269	389,269
Net book value		
At 31 December 2018	389,269	389,269
At 31 December 2017	378,144	378,144

13 Debtors

	2018 £	2017 £
Trade debtors	192	1,348
Prepayments	-	1,056
Other debtors	81,749	114,240
	81,941	116,644

14 Creditors: amounts falling due within one year

	2018 £	2017 £
Trade creditors	12,411	27,486
Other taxation and social security	5,845	12,014
Other creditors	17,693	78,921
Accruals	36,164	3,026
	72,113	121,447

15 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 £13,250 (2017 - £9,751).

The Association of Applied Biologists

Notes to the Financial Statements for the Year Ended 31 December 2018

16 Funds

	Balance at 1 January 2018 £	Incoming resources £	Resources expended £	Other recognised gains/(losses) £	Balance at 31 December 2018 £
Unrestricted funds					
General	(504,287)	(272,548)	279,532	32,734	(464,569)
Restricted funds	(16,271)	-	824	-	(15,447)
Total funds	(520,558)	(272,548)	280,356	32,734	(480,016)
	Balance at 1 January 2017 £	Incoming resources £	Resources expended £	Other recognised gains/ (losses) £	Balance at 31 December 2017 £
Unrestricted funds					
General	(453,745)	(270,828)	247,152	(26,862)	(504,283)
Restricted funds	(16,379)	-	108	-	(16,271)
Total funds	(470,124)	(270,828)	247,260	(26,862)	(520,554)

17 Analysis of net assets between funds

	Unrestricted funds General £	Restricted funds £	Total funds £
Tangible fixed assets	4,487	-	4,487
Fixed asset investments	389,269	-	389,269
Current assets	142,102	16,271	158,373
Current liabilities	(72,113)	-	(72,113)
Total net assets	463,745	16,271	480,016

18 Analysis of net funds

	At 1 January 2018 £	Cash flow £	At 31 December 2018 £
Cash at bank and in hand	142,589	(66,157)	76,432
Net debt	142,589	(66,157)	76,432

PRESIDENT'S REPORT



The Association's conferences and journals continue to play a vital role in the delivery of AAB's mission to promote applied biology. The 2018 conference programme saw 11 meetings covering a wide range of interests from mathematical modelling to soils to crop protection and IPM. None of this would be possible without the enthusiasm and commitment of the organisers. Ensuring that the topics, format, location, quality and cost of our conferences meet the needs and expectations of Members and the wider applied biology community is a high priority. At our July 2018 Council meeting, we began a process of review and refresh, which is being taken forward through 2019 by the Programme Secretary and Specialist Group Convenors.

Our three journals are a tremendous asset to the Association. Our youngest publication, Food and Energy Security, delivered a small surplus to AAB for the first time, and saw its Impact Factor for 2018 rise to 4.781 (from 3.032 in 2017), a tremendous achievement. Total submissions to Plant Biotechnology Journal increased by over 10% compared to 2017, to over 900, with China still the largest source of submissions. The scope of *Annals of Applied Biology* was broadened to include crop ecology, and the Journal continues to have wide appeal to applied biologists across the world. We are very grateful to the editors, editorial staff and reviewers for their hard work, and for the continuing support of our publisher Wiley. With the changing publications landscape, and the move towards Open Access, we will be looking closely at the future direction for our journals during 2019.

2018 saw a review of the Association's investment policy, led by General Treasurer Andy Page, in line with our charitable objectives and guidelines from the Charity Commission. After a rigorous assessment process, we are pleased to have appointed Tilney as our new Investment Managers.

I would like to thank Christine Watson, our President during 2017 and 2018, for her guidance and dedication over the last two years. We are delighted to have Christine Foyer as our new President-Elect. After 6 years, Nigel Halford's term as Programme Secretary came to an end last December. I would like to thank Nigel for all of his hard work on behalf of AAB, and I am pleased to report that Rob Carlton has now taken on this crucial role.

Our nine specialist groups provide focal points for the wide range of interests that exist within our membership. During 2018, Miguel Aranda succeeded Maruthi Gowda as convenor of Virology, Kairsty Topp replaced Rob Carlton as convenor of Cropping and the Environment, and Rumiana Ray took over from Tim Pettitt as convenor of Applied Mycology and Bacteriology. We are very grateful to all of our convenors, and specialist groups, for their support and contributions to the success of the Association.

At the end of 2018 we said goodbye to Richard Whiston from the AAB office team. Amongst other things, Richard was instrumental in the development of the new, updated AAB website that was launched in 2018, and in the reintroduction of the monthly e-newsletters. We were delighted to have Hussein Gherli join the team in November, to pick up where Richard left off.

I would like to thank all members of Council for their support, enthusiasm and commitment to AAB, and finally Carol, Alberto and the office team for all of the hard work they put into AAB.

Stuart Knight

June 2019

REPORT OF ACTIVITIES

MEMBERSHIP

A total of 56 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 2018 was 461 - 114 less than the year before. The number of Honorary members at the end of the year was 10, 15 being the maximum permissible under the Laws.

The list of current Honorary members is:

Ken Davies	F Allen Langton	Tony F Murant	Roger Rooke
Bryan D Harrison	Fred Last	Martin A J Parry	Nigel Scopes
Trevor J Hocking	Mike J May	John Pickett	H F van Emden

Student Travel Grants awarded during 2018

Name	Conference	Award
K Hetherington	Advances in Legume Science and Practice	£121.52
B Babalola	Advances in Plant Virology	£131.40
M Rashifard	Advances in Nematology	£500.00
K McDonald-Howard	Advances in Nematology	£70.25
	TOTAL	£823.17

A decision was made at Council during 2018 to carry over unspent funds from the Student Travel Fund to the following year. The fund for 2019 will be £1500 + the outstanding amount for 2018 (i.e. £676.83), making a total to be awarded in 2019 of £2176.83.

PUBLICATIONS

The Association of Applied Biologists publishes a range of scientific journals, conference papers, abstracts and newsletters in keeping with the charitable aims of the Association. These publications represent a notable resource for the members of the Association and the plant science research community. The scientific publishing area is undergoing great change with the move towards open access of much peer reviewed information. It remains unclear how this will impact on the research community as only well-funded and resourced studies may benefit from these changes. Additionally one outcome will be to change the nature and scope of library services through the introduction of country specific “transitional deals”. However the Association's Journals continue to develop, with these changes underway in the background. The Plant Biotechnology Journal has moved to full open access within the last two years and has overcome some of the negative impacts of the transition. The relatively new title Food and Energy Security is also open access and has achieved its target growth for the year. *Annals of Applied Biology* is also maintaining its broad appeal to the applied plant science community. 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.

Annals of Applied Biology

There were six issues of *Annals* published during 2018 with a total of 60 papers published. The 2018 Impact Factor for *Annals of Applied Biology* fell to 1.611 (2.046 in 2016). The target is to increase the numbers of papers published in 2019 in advance of the new five year publishing agreement currently being negotiated with publishers. As part of this agreement the print version of *Annals* will be phased out in 2020 but it will be replaced by subsidised access to *Annals* online for a larger number of AAB members. There are also plans to widen the scope of *Annals* to include agricultural animal science and agricultural ecology. With the incorporation of these new areas and through the publication of reviews the impact factor for *Annals* should increase over the medium term. The journal currently stands at 13th of 56 in the Agriculture & Multidisciplinary area.

Plant Biotechnology Journal

PBJ is fully open access and the total submissions for 2018 ended over 900, of which 175 papers were published (136 in 2017). The PBJ impact factor has increased from 6.3 in 2017 to 6.8 in 2018. Approximately 56% of submissions originated from China in 2018, followed by the USA and India. The acceptance rate for PBJ was 20% in 2018 and acceptance rates on PBJ tend to be higher for papers from USA, UK, France and Australia. PBJ is planning to publish more letters and editorials given that its competitors in plant science research published up to 95 Letters and 53 editorials whereas PBJ only publish 3 letters. Rejected manuscripts that require additional research have been given the option of being submitted as a PBJ letter. A new reviews editor has been appointed.

Food and Energy Security

The initial impact factor of 2.286 for 2016, awarded in 2017, was a very good starting point. The impact factor for 2017 was 3.032 and for 2018, awarded in 2019, has risen to 4.781, ranking the journal as 8th out of 135 publications in the Food Science & Technology area. The financial target for FES is 20 paid articles in 2019 and 40 paid articles in 2020. Rejected papers from other Journals (cascade journals) can be submitted to FES for consideration. The current cascade journals for FES are *Annals of Applied Biology*, *Global Change Biology*, *GCB Bioenergy*, *Plant, Cell Environment* and there are plans to add more which should help maintain the publication targets.

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 but might require constant revision due to the use of new techniques in taxonomy. The resource is useful for students, teachers and researchers. It is unique in the breadth of the information that it covers but it might ideally be delivered in another format in the longer term.

Newsletter

The new online version of the Newsletter was produced in 2018, with nine issues being sent out during the year. It will continue to be produced monthly in 2019. Articles from AAB members are welcomed.

AAB website

The website sub-group met several times with the aim to improve and develop the new AAB website as well as the social media related accounts to create a friendly interface to allow more interaction with AAB members and external followers.

The new website was initially developed by Richard Whiston and reviewed consistently by the website sub-group consisting of Guy Barker, Carol Millman, Alberto Vitale and Hussein Gherli. The recent additions and updates to the website are listed below:

- The *Aspects of Applied Biology* webpage was completed by uploading a table of contents pdf files and updating the availability for each volume.
- New webpages titled “Past Conferences” and “Submit an Abstract” were created under the Conference main menu. The “Past Conferences” page includes previous AAB conferences for the past two years, 2017 and 2018. The “Submit an abstract” page has this URL address www.aab.org.uk/abstract that links directly with every conference website.
- For the first time, the membership renewal and joining were changed to be clearer and easier on both the membership and home webpages. Also, access to members’ only pages were made more visible and easier to log in and browse the area.
- The Specialist Groups webpages have been updated with the Groups’ Conveners and Members information and pictures where available.
- The Search Engine Optimisation was modified, key words were added and linked to all the website pages and page names so that the website appearance on search engines is more visible.

The sub-group will meet when necessary to discuss issues related to the website improvement.

Social media

The Association previously had Facebook and Twitter accounts. These are now being updated frequently with information on conferences, early view papers published in both *Annals of Applied Biology*, *Food and Energy Security* and *Plant Biotechnology Journal*, in addition to other items that we believe are of interest to members. The Twitter feed is also linked to the website home page. We have facilitated a single click to like/

share conferences from every event website to social media, essentially Facebook and Twitter. In the world of social media, the AAB has to keep pace and maintain interactions with members and followers. The *Annals of Applied Biology* has an up to date Twitter account. The Nematology Specialist Group have also had an account and it is now continuously updated. We have recently created a Twitter account for the Food and Energy Security journal. We have also recently launched an AAB Instagram account and it is linked to the website.

SCIENTIFIC CONFERENCES

A total of 483 delegates attended the conferences in 2018 compared with 499 in 2017, and 720 in 2016. The average number of paying delegates was 38 compared with 54 in 2017, and 91 in 2016.

Details of the full scientific conference programme for 2018 are given below:

Title of Conference	Dates	Number of delegates	Specialist group
International Advances in Pesticide Application	8 – 11 January	94	Pesticide Application
Mathematical Modelling in Plants	20 March	20	Plant Physiology and Crop Improvement
Advances in Legume Science	21 – 22 March	33	Cropping and the Environment
Ecosystem Health and Habitat Management	27 March	36	Cropping and the Environment
Advances in Plant Virology	12 – 13 April	68	Virology
Advances in Soil Biology	18 April	17	Soil Biology
Soil Improvement	16 October	47	Cropping and the Environment and Soil Biology
Dose expression	6 – 7 November	40	Pesticide Application
Crop Protection in Southern Britain	12 – 13 November	47	Cropping and the Environment
Advances in Nematology 2018	11 December	40	Nematology
Adv Biocontrol and IPM	12 – 13 December	41	Biocontrol and Integrated Pest Management
	Total	483	

Aspects of Applied Biology

The following volumes of *Aspects of Applied Biology* were published in 2018:

No. 137 International Advances in Pesticide Application

No. 138 Advances in Legume Science and Practice

No. 139 Ecosystem and Habitat Management – Research, Policy, Practice

No. 140 Soil Improvement: Impact of Management Practices on Soil Function and Quality

No. 141 Crop Production in Southern Britain 2017

Donations and sponsorship 2018

Crop Protection in Southern Britain 2018	Adama	£2,500.00
Advances in IPM 2018	Koppert	£750.00
Advances in IPM 2018	Biobest	£250.00
Advances in Legume Science and Practice	BES	£1,500.00
Mathematical Modelling in Plants	Curtis Analytics Ltd	£500.00
	TOTAL	£5,500.00

AAB SPECIALIST GROUP REPORTS

Applied Mycology & Bacteriology

Dr Rumiana Ray from the University of Nottingham replaced Dr Tim Pettitt as the Convener of AM&B Group in January 2019. Current group members are Dr Neil Havis (SRUC), Prof Jon West (RRES), Dr Faye Ritchie (ADAS), Prof Neil Boonham (Newcastle University), Dr Amanda Bennett (AHDB), Dr John Clarkson (Warwick University). The group will hold a group meeting in the first half of 2019, as well as joint conference with BSPP titled “Advances in soil-borne disease etiology and control” to be held on 24 October 2019 at the De Vere Orchard hotel in Nottingham.

Biological Control and IPM

Convener: Toby Bruce

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

The group moved the 2018 annual conference back to the Olde Barn in Marston Lincs at the request of the conference delegates.

Advances in Biocontrol 2018: Making it work for the Farmer – 12-13 December 18

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.

2018’s theme was “Making it work for the farmer”. We took a look at IPM from the perspective of the farmer growing crops with talks from leading innovative farmers John Pawsey (Shimpling Park Farm) and Jake Freestone (Overbury Estate) together with Emma Hamer (NFU Plant Health). The farming community are interested in implementing IPM and if it helps they to reduce costs on pesticides then it may help to improve farm profitability. Marketing prospects for produce are improved if environmental standards are high and there is likely to be an emphasis on IPM in the future British Agricultural Policy.

The ‘Risk assessment and mitigation’ session was well represented by the Health and Safety Executive (HSE) with Adrian Dixon, Jon Chambers and Sue Mattock. It was very encouraging to hear that they have a new initiative to fast track the registration of biopesticides and lower risk alternatives. Interesting talks were presented on Development of novel approaches ranging from trap cropping cabbage stem beetle (Steve Ellis) to push-pull of *Lygus* bugs (Michelle Fountain) to classical biocontrol of weeds (Dick Shaw) to enhancing populations of natural enemies with supplementary food (Stephanie Williamson). Neal Ward presented tomato IPM programmes including how they need to be modified on arrival of new invasive pests such as russet mite. Susannah Bolton presented the latest thinking from the AHDB.

A take home message from the conference was that we need to increase the pace of innovation because pests are currently evolving resistance to interventions at a faster rate than new interventions are being provided. Farmers are willing to engage if practical solutions can be provided – there is an urgent need for new tools in the crop protection toolkit. This is an opportunity as well as a challenge. As Applied Biologists, it is our role to research and develop new more biologically based solutions now the answers to pest challenges are no longer all coming out of the pesticide can.

The 2019 conference will be held again at the Olde Barn Hotel from 20-21 November with the theme as addressing the innovation crisis.

Cropping and the Environment

CATE Group: Rob Carlton (convener), Kairsty Topp, Andy Evans, Kate Smith, Naomi Jones, Jake Bishop, Syed Shah and Will Smith

The group welcomed Jake Bishop, Syed Shah and Will Smith in 2018.

We were saddened by the sudden death of David Stock in 2018. David was an active member of CATE and a past member of the Pesticide Applications Group. Ex-convener and member Elizabeth Stockdale left the group after many years' activity, and Mohammed Shamal also departed. The group wishes them both good fortune for the future. Rob Carlton stepped down as group convener at the end of 2018 and Kairsty Topp took on the role.

CATE was involved in three conferences during 2018:

Advances in Legume Science and Practice Held over two days in Glasgow during March, the conference brought together a broad range of researchers to explore how legume research and practice is advancing. Christine Watson, President of AAB in 2017 and 2018, set the scene in a talk about opportunities for locally produced legumes in Europe citing a case study from North East Scotland that explored impact of organic rotations on extractable protein in forage crops. Other speakers on the first day went on to explore yield instability, yield enhancement, nutrition, nitrogen fixation, soil biology and intercropping, all with an emphasis on the interplay between these elements. The day ended with a fascinating wide-ranging discussion session chaired by Kairsty Topp. Alan Duncan started day two describing decision-support tools for East African small holders and the morning continued with a couple more papers on farming and agronomy, before the focus shifted to a pair of papers on pollinators. Geoff Squire opened the final session with a paper exploring means to enhance legume production and consumption in Europe. A pair of papers on stress tolerance followed, including one presented by Christine Foyer, the current President-elect of AAB, and the session was wrapped up with a paper investigating seed quality enhancement from a biotechnological point of view.

This was a small conference which allowed for an informal atmosphere promoting lots of discussion. Scientists from a number of European countries attended the meeting with a strong French contingent representing INRA, and the possibility of a follow up meeting in France was welcomed.

Ecosystem and Habitat Management: Research, Policy, Practice

This conference was the latest in the "Vegetation Management" series. The title reflected the increased emphasis on the appropriate management of ecosystems to deliver benefits for humans via ecosystem services in cropped and uncropped areas, whilst continuing to acknowledge the ongoing importance of managing vegetation to enhance and/or control species. The number of delegates was lower than at previous meetings, but the conference atmosphere was highly personable and allowed for more open questioning and discussion. In total, there were 19 platform presentations and seven poster presentations. Those presenting posters also had to do a three-minute "flash presentation" to describe the thrust of their work on one PowerPoint slide and to entice delegates to find out more; this worked particularly well. The conference was supported by several invited speakers, which added much value to the conference. Dr Nick Sotherton from the GWCT opened the conference providing a talk on "Arable production and farm wildlife – managing the balance: The GWCT contribution". This talk encapsulated what has been achieved by the GWCT, and in particular it's contribution to agri-environmental policy. Graham Begg from The James Hutton Institute gave a talk on "The future of agri-environment management in the UK: How agro-ecological research can help to develop real-world solutions". This was certainly a thought-provoking talk, especially in light of Brexit. Keith Walters (Harper Adams University) delivered a solid talk on the "Response to declining availability of Plant Protection Products: a central role for vegetation management". The need for a greater adoption of non-cropped habitat to deliver pest regulation services was advocated. The fourth and final invited speaker was George Peterken, who delivered a superb account on aspects of Lady Park Wood following 70 years of recording. George provided a true inspiration for others.

Soil Improvement: Impact of Management Practices on Soil Function and Quality

This one-day event was held in October at NIAB. The focus of the conference reflected the role of soil management practices and improved understanding of soil health in managing land sustainably. Elizabeth Stockdale, NIAB, opened the conference with her presentation, which focussed on Soil Health – Moving from general principles to the site-specific on farm- management at rotational level. Bryan Griffiths, SRUC, presented a traffic light tool summarising the key physical, chemical and biological interactions. The tool is aimed at helping farmers and advisors identify management techniques that will improve soil health. Other

speakers in the morning session explored the role of grass leys and cover crops on soil health. The afternoon sessions focused on the effect of management on soil structure with talks on horticultural soils and methods to relieve compaction. The conference concluded with a discussion, during which it was raised that researchers, farmers, policy makers and advisors need to work together to devise management strategies to improve soil health. Notably, it is important to understand what is happening on farms. Historically work was published in this area, which should not be forgotten, but it also requires updating to reflect modern practices.

Food Systems

Convener: Wendy Russell (University of Aberdeen)

Group members Susan Duthie (The Rowett Institute), Bryan Handley (Knowledge Transfer Network and Julia (University of Newcastle)

There was considerable planning in 2018 for a major conference on Food Systems for 2019 but, unfortunately, this had to be cancelled due to lack of offers.

Nematology

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), Kim Davie (SASA), Rebecca Lawson (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.

Conference arranged during 2018:

Advances in Nematology, Linnean Society, London - 11 December 2018

Advances in Nematology took place on the 11th December 2018, at the Linnean Society in Piccadilly, London - the worlds’ oldest learned biological society. Delegates delivered their presentations in the prestigious lecture room, adorned with original portraits of famous biologists including Charles Darwin and Alfred Russel Wallace, while lunch and coffee breaks were taken in the library that holds many seminal biological texts and dates back to 1829. Advances in Nematology is a meeting that encourages PhD students, early career researchers and leading experts to make submissions on a range of topics including biology, ecology, epidemiology, management of plant parasitic nematodes, entomopathogenic nematodes and diagnostic methods. Many regular delegates recognise it as a good meeting for PhD students to deliver their first poster or platform presentation. This year, 41 delegates attended from a range of countries including the UK, Republic of Ireland, Czech Republic, Georgia, Spain and Germany, representing industry, academia and government.

The conference began with a short AGM where the Convenor (Dr Matthew Back) discussed future conference plans and activities of the AAB Nematology Group. Raquel Campos Herrera (invited speaker from Instituto de Ciencias de la Vid y del Vino in Spain) then provided a succinct and engaging summary of her work investigating practices that improve soil ecosystems and biological control by entomopathogenic nematodes. Following this, delegates heard presentations on topics such as effectors, metabolism of nematocides and nematodes found in Morocco. After the morning session, Rosa Manzanilla-Lopez chaired the poster ‘flash’ presentations. During the lunch-break, delegates had an opportunity to view the posters and vote for their preferred paper.

In the afternoon, our second invited speaker, Keith Davies (University of Hertfordshire), gave a great summary of his work on the bacterial parasite *Pasteuria penetrans* and its interaction with nematode cuticles. The presentations that followed covered an array of topics including biofumigation, proteomics, entomopathogenic nematodes and viability assessment methodology.

The day concluded with the student prizes announced by Raquel Campos Herrera and Rosa Manzanilla-Lopez. The Brian Kerry Prize for the best platform presentation went to Helena Rawsthorne (University of Southampton) for her paper entitled 'Using *C. elegans* social behaviour to investigate genes associated with autism spectrum disorder'. James Cutler (Liverpool John Moores University) won the AAB prize for his poster entitled 'Pathogenicity of wild isolated *Phasmarhabditis hermaphrodita* against pest slug species. At the end of the conference, Rosa Manzanilla-Lopez and Barbara Pembroke were thanked for their excellent contributions to the organisation of Advances in Nematology meetings following the completion of their terms for the AAB Nematology Group.

Future Conference Programme

5th Symposium of Potato Cyst Nematode Management 10-11 September 2019: Harper Adams University

Advances in Nematology, 10 December 2019: SASA, Edinburgh

Pesticide Application

Convener – Tom Robinson

Group members – Paolo Balsari, Simon Cooper, Emilio Gil, Richard Glass, Colin Mountford-Smith, Clare Butler Ellis, James Thomas, David Nuyttens, and Jan van de Zande.

Co-opted member – Ben Magri.

The two main activities of the Group during the year have centred on:

International Advances in Pesticide Application

The latest (15th) AAB conference on "International Advances in Pesticide Application" was held from 9–11th January in Brighton. 94 delegates attended, with 41 representing 11 European countries and a further 16 from Australia, Brazil, Canada, China, Israel and USA. The programme had 9 sessions with oral presentations, covering topics from use of remotely piloted aircraft, equipment standards, protecting vineyards and fruit, field crops and vegetables, formulations and adjuvants, droplet measurements, spray drift and bystander exposure. Brief oral presentations of the eight posters were also included in the programme. In addition to the presentations on recent research, uniquely this conference included a presentation on "A season in the Life of a Spray Operator" by Iain Robertson, who won the UK Farm Sprayer Operator of the Year award in 2007. His presentation highlighted his key problems, especially weather conditions limiting when sprays can be applied, but he also commented on the size and design of pesticide containers in relation to the time taken to prepare sprays, spray volume applied, nozzle selection and buffer zones. Labels should be easier to use with simpler advice, and lids colour-coded to represent pesticides, herbicides, etc. The first two papers contrasted the early studies using a Remoted piloted aircraft (RPA) in the USA and similar technology in China where drones are referred to as UAV's Unmanned aerial vehicles. Ken Giles pointed out that in the USA, the regulatory authorities insist that the RPA operator is a fully qualified aircraft pilot with medical certificate. Areas considered most suitable for RPA applications is on relatively niche areas on hillsides, which are difficult to treat with ground equipment, but the technique is expensive as it requires ground equipment to mix and load the spray as the RPA tank can only carry 16 litres and needs frequent refilling with the current spray application rates of up to 100l per hectare. In China, there are large areas of rice divided into very small "farms" grown on irrigated terraced areas, which are difficult to spray using knapsack sprayers as well as impossible with other types of ground equipment. By 2017, over 8000 small farms were using a UAV to spray crops. Professor He reported on trials using adjuvants to minimise drift, a topic also covered by Andrew Hewitt, where a decision support system has been developed to optimise spray coverage with minimal drift. In the next session, Emilio Gil explained the complications when evaluating an orchard sprayer to meet ISO 16119-3. The testing is complex, expensive and time consuming, requiring vast quantities of water. The aim is to have practical guidelines to assist manufacturers and growers. Next Matthew Horne provided an interesting comparison between ten lever-operated knapsack sprayers commercially available in the UK to check their

compliance with DIS ISO 199322. The most compliant sprayer passed 32 of the 37 tests undertaken. Many were not provided with adequate instructions, pressure control, nozzle outputs or information on UV resistance of plastic tanks. In the next presentation, ISO 12809 referring to pumps on crop protection equipment was examined by three test stations (in Hungary, Germany and Italy) concluded that the real pump output can differ by more than 5%, so a part of the Standard needed a test for measuring pump performance when mounted on the sprayer, rather than a test rig. Lastly in this session, Manfred Roettele described a new online advice and information tool designed to help protect water by reducing loss of plant protection products to streams and other water in the environment. Ken Giles began the next session with discussion on a recapture and spray recycling system for spraying vineyards in California, with which spray drift was significantly reduced but provided comparable deposition to conventional spraying. Recycling sprays in a vineyard was the subject of another presentation from Italy. In the orchard crop situation, Abraham Gamliel reported on various changes in sprayer design to improve deposition at various tree heights in Israel. In Spain, studies with a Smartomizer sprayer in citrus orchards, showed that it was possible to reduce drift, power consumption and noise while still maintaining similar spray coverage with a conventional air blast sprayer. A multiple row tunnel sprayer in Holland was more efficient than a conventional cross-flow fan sprayer. Lastly in this session, different weed control techniques were examined. Designing a spray boom to treat crops grown on beds, with different numbers of rows and crops, required careful selection and positioning of nozzles to optimise spray coverage and avoid spray reaching the inter-bed area. Timing of insecticide sprays in the evening was better than early morning treatment against *Spodoptera frugiperda* in Brazil, especially when spray was targeted down into the whorl of leaves in young maize plants. Moving to a post-harvest situation, control of *Gleosporium* infection on harvested fruit stored in boxes at a low temperature, using a ULV cold fog, was investigated with a computational fluid dynamics model. Deposition was far from uniform but suggested using single bin level and air-assistance a more even distribution of droplets inside a bin could be achieved. Control of head blight on winter wheat was improved using double flat fan nozzles as spray distribution was better on the vertical target than spraying downwards. Using a droplet on tractor booms has generally been avoided by farmers, but in a rape crop Robert Heinkel (Lechler) was able to protect crops without spraying the upper flowering section of plants and this reduced transfer of spray deposits into bee hives. The next session was on formulation and adjuvants, with interest in tank mixes, viscosity and surface tension being important factors. Ulisses Antuniassi (Brazil) reported that a new formulation of 2,4-D choline salt provided lower drift in a tank mix, regardless of the glyphosate formulation which contained glyphosate in the tank mixture. Fernando Carvalho (Brazil) reported that at 50l per hectare using a XR 8003VS nozzle at 200kPa differences in viscosity, surface tension and droplet size were reduced when an oil-based adjuvant was mixed in the spray. In the last presentation of the formulation session, David Nuyttens (Holland) demonstrated that a small leaf wetness sensor has the potential to assess spray deposition within a crop canopy. Five posters were briefly presented in a separate session. Graham Matthews pointed out that water based sprays had been applied with fan and cone nozzles since the 19th Century, but it was possible to achieve good yields with ultra-low volume sprays, that were less likely to be washed from plants by rain. ULV sprays can be applied with spinning disc nozzles with a much narrow droplet spectrum that enabled good coverage of crops such as cotton. Such sprays needed to be considered when developing use of RPA to improve their viability to treat larger crop areas. By droplet size measurements in a wind tunnel, the fraction of spray not sedimented at 5m downwind (drift ratio value) and the ratio between the distance of droplets to the sampling position and wind velocity (Time of flight) was considered by Jean-Paul Douzals, (IRSTEA) to be a relevant and stable indicator of potential spray drift. Then Frederic Lebeau (Belgium) characterized droplet sizes when a turbulent round jet impacted on a motionless disk engraved along its circumference by radial grooves. Smaller liquid jets were formed instead of a liquid sheet, so the Span was close to those of rotary atomisers. The next session on drift and Bystander exposure had five presentations. In Holland, they compared deposition on passive and active samplers 0-10 m above ground with ground deposition at 50m, where more was collected by active samplers, when spraying with a flat fan nozzle and a 90% drift reduction nozzle. Clare Butler-Ellis (UK) reported on using nontarget objects in a wind tunnel to assess impaction of sprays and relate the data to the BREAM project in which modelling was used to assess spray exposure of residents and bystanders. Henk Jan Holterman (Wageningen) discussed how to consider ultra-low deposits and how to interpret spray drift when very low deposits are measured. An interesting paper followed in which a unique means of moving a small droplet counter developed by Billericay Farms services could be used to count different size droplets across a wind tunnel. Finally on

day 2, there was a description of strategies to mitigate dust drift from plants when sowing seed treated with pesticides. On the last day six papers were in a session on measuring spray drift, one of which was concerned with the exchangeability of data on spray drift between different classification systems within the EU, followed by five concerned with site specific and variable rate applications. Away from agriculture, one presentation gave information on trials where killing mosquitoes during swarming was being investigated in west Africa. Exhibitors at the conference were Oxford Lasers and TSI GmbH. This report can only provide the briefest look at the vast amount of data provided, but all those who need more information, the proceedings of the conference are available from the Association of Applied Biologists as *Aspects of Applied Biology* 137.

The Dose Expression Workshop, in vineyards and orchards. (Adjusting The Dose To Match The Crop Canopy). held at Universitat Politècnica de Catalunya, Barcelona, Spain on 6–7th November 2018. The organisation team led by Emilio Gil with co-organisers Paolo Balsari, and Jan Van de Zande, put together an excellent, varied programme of invited and offered presentations. 42 delegates attended from all over Europe, representing chemical companies, registration, research, trials and commercial practice. The workshop was a datum point for the research knowledge, and uptake of these techniques designed to minimise the deployment of pesticides, while maximising their benefit. A key lesson from the workshop: The techniques that manufacturers use to apply products in development trials, are less effective than good application practice on farm. Which can result in label doses being greater than necessary. The venue was excellent. Carol Millman ensured the needs of all the delegates were well catered for.

Current Activities

Organisation of the International Advances in Pesticide Application (IAPA) to be held at the Hotel Mercure in Brighton on 28–30 January 2020. Principle organiser Tom Robinson. The original plan was to hold the conference in Catania Sicily. However, with the availability of the venue still in doubt near the end of January, the organising team decided to hold the conference again at the Hotel Mercure in Brighton.

Sprayer Cleaning Workshop

A Sprayer Cleaning Workshop is being organised by Paolo Balsari at Oberbozen, Italy from 2–3 October 2019. The importance of this workshop is to reduce the *c.* 60% of CPP found in water that comes from poor sprayer cleaning practices. The target delegates include Chemical Companies, Advisors and Equipment Manufacturers.

Plant Physiology & Crop Improvement

Convener – Guy Barker (University of Warwick)

Group members – Luke Bell (University of Reading), Nirit Bernstein (Volcani Centre, Israel), Yara Boubou (Hadlow College), Simon Griffiths (John Innes Centre), Nigel Halford (Rothamsted Research), Jim Monaghan (Harper Adams University)

There was a one 1-day conference in 2018 - *Mathematical modelling in plants* on 6 March at Rothamsted Research, Harpenden. There were fewer conferences for our group in 2019, and the reason was because a leafy salads meeting was postponed as was a genetics resources meeting.

The genetics resources meeting will be held early in 2019, along with the leafy salads one in November, with more exciting conferences in the pipeline for 2020.

At the group meeting it was decided to expand the membership of the group to help deliver the core messages of the AAB. Efforts in the coming year will concentrate on this.

Soil Biology

Convener: Matthew Shepherd (Natural England) Group members: Kevin Butt (University of Central Lancashire); Lea Carlesso (Rothamsted); Felicity Crotty (Game and Wildlife Conservation Trust); Richard Gantlett (University of Reading); Phil Murray (Rothamsted/Retired); Olaf Schmidt (University College Dublin); Peter Shaw (Roehampton University); Kate Storer (ADAS);

The main activity for 2018 was the organisation of a conference Entitled “Advances in Soil Biology: The Soil Macrobiome” which was held on 18th April 2018 at Roehampton University. The conference enjoyed a keynote presentation on earthworm ecology from Emma Sherlock, Curator of Annelids at the Natural History Museum London. The conference also included presentations on the use of soil mesofauna as environmental indicators by Matthew Shepherd (Natural England), hypogean Pitfall trapping from Ian Sims (Syngenta), Earthworm responses to tillage practice change from Peter Shaw (Roehampton) on behalf of Felicity Crotty (GCWT), The bioremediation of hydrocarbon-contaminated soil using brewery spent grains from Keith Thomas (Sunderland University), the attitude of farmers to caring for soils from Anna Krzywoszynska, The use of mycorrhizal fungi to improve horticultural growing media from Louisa Robinson-Boyer (East Malling Research), using mitochondrial metagenomics to understand the ancient phylogenetic heritage of soil mites from Alfried Vogler (Imperial College), and developing axenic earthworms as a tool for studying decomposition microbiology. Despite the excellent venue and fantastic speakers, the event attracted only a small audience of ~17 attendees. Due to low numbers, the group strove to keep costs down by reducing the size of the rooms booked, and by avoiding using AAB staff to run the event on the day. The conference included a plenary workshop discussion of the reasons why the event didn’t attract more interest, and covered issues relating to topic, advertising, timing and cost of the event. Later in the year, on 5th June 2018, the group organised a webinar presentation from Dr Tim King of Oxford University on the ecology of the Yellow Meadow Ant entitled “As Old as the Hills: Ants Ecosystems and Engineers” which was attended by some 48 participants. The webinar was hosted at no cost to the AAB through Natural England’s webinar system, and was freely available to all attendees, which included many NE staff as well as other interested parties. The event was recorded and the recording made available to the AAB staff for distribution through the website to members, although, because it had been created using NE’s account, the webinar was also made available to the general public through other routes too. The committee of the Soil biology special interest group convened by teleconference 6 times on 7th February, 6th March, 28th March, 9th April, 25th May and 20th June. Following the disappointing turnout for the conference Matthew Shepherd also held teleconference meetings with the President Christine Watson, and president elect Stuart Knight on 16th July, to discuss approaches to help generate greater numbers for the Soil Biology SIG events. During the year, a proposal was developed and put to council for an event “Communicating Soil Biology”, which was originally intended to take place during Autumn 2018, but has now been moved forward and is planned to take place in 2019.

Virology

Convener – Maruthi Gowda (University of Greenwich) (until April), Miguel A. Aranda (CEBAS, CSIC) (from April)
Group members – Gerard Clover (RHS, Wisley), Andrew Love (James Hutton Institute), Charlotte Nellist (NIAB East Malling Research), Antonio Olmos (CEBAS, CSIC) (until April), Jens Tilsner (University of St Andrews), Trisna Tungadi (JR Biotek Foundation) and John Walsh (University of Warwick)

The Virology group organised the International Advances in Virology conference in Birmingham at the Jury’s Inn on 12-13th April 2018. The meeting was attended by 67 delegates (7 more than budgeted) from Europe and also from Pakistan, Brazil, Israel and South Korea. The meeting also included two keynote presentations on “Synthetic virus-like particles and how to make them in plants” by George Lomonosoff (John Innes Centre, Norwich, UK) and “Immune nuclear bodies against begomovirus” by Elizabeth Fontes (Universidade Federal Viçosa, Brazil). The next conference is planned for 29–31 October 2019, in Rome, in conjunction with the EMERAMB (ARIMNet2) meeting on Emergent viruses in the Mediterranean Basin.

ELECTION TO SPECIALIST GROUP COMMITTEES FOR 2020

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 2019.

**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

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***Delete as appropriate**

Consent to nomination

I agree to the nomination for the committee of

Signed

Address

.....

..... **Date**

SPECIALIST GROUP COMMITTEES AS AT JULY 2019

Applied Mycology and Bacteriology:

R Ray (Convener) (2021 1st term)
A Bennett (2021)
N Boonham (2021)
J Clarkson (2021)
N Havis (2020)
V Mcmillan (2021)
T Pettitt (2021)
F Ritchie (2021)
J West (2021)

Biological Control:

K Walters (Convener) (2021 1st term)
T J A Bruce (2021)
D Chandler (co-opted)
R Collier (2019)
C Rowley (2021)
R Shaw (co-opted)
P Walker (2019)
X Xu (2020)

Cropping and the Environment:

K Topp (Convener) (2021 1st term)
J Bishop (2020)
R Carlton (2021)
N Jones (2019)
S Shah (2020)
K Smith (2018)
W Smith (2020)

Food Systems:

Vacancy (Convener)
J Cooper (2020)
S Duthie (2020)
B Hanley (2020)

Nematology:

M Back (Convener) (2019 2nd term)
S Edgington (2021)
K Davie (2021)
Holden-Dye (2021)
R Lawson (2021)
W Wesemael (2020)

Pesticide Application:

T H Robinson (Convener) (2019 1st term)
C Butler-Ellis (2021)
P Balsari (2020)
S E Cooper (2020)
E Gil (2020)
C R Glass (2021)
B Magri (co-opted)
C Mountford-Smith (2019)
D Nuyttens (2020)
J Thomas (2021)
J van de Zande (2019)

Plant Physiology and Crop Improvement:

G Barker (Convener) (2019 1st term)
L Bell (2021)
N Bernstein (2021)
Y Boubou (2021)
S Griffiths (2020)
N Halford (2021)
J Monaghan (2020)

Soil Biology:

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

Virology:

Miguel Aranda (Convener) (2021 1st term)
Gerard Clover (2020)
A Love (2019)
Charlotte Nellist (2019)
J Tilsner (2019)
T Tungadi (2019)
John Walsh (co-opted)

Appendix 2 of the AAB Report 2018

New Members of the Association 2018

Dr	Julie Abisgold	Ms	Cathryn Lambourne
Mrs	Bisola Babalola	Mr	Mark Ledebuhr
Mr	Andrew Barr	Mr	Peter Lillis
Ms	Lucy Bates	Mr	Yousef Mater
Dr	Amanda Bennett	Mrs	Kerry McDonald-Howard
Mr	Aashaq Hussain Bhat	Miss	Hannah McGrath
Dr	Anne Bhogal	Dr	Vanessa McMillan
Dr	Lisa Black	Dr	Phil Murray
Prof.	Kathleen Brown	Mr	Pedzisai Nemadziba
Mr	Robert Brown	Dr	Antonio Olmos
Dr	Lucie Buchi	Mr	Chris Nicholl
Ms	Charlotte Chivers	Mr	Keith Norman
Mr	Christopher Coates	Miss	Tara O'Neill
Ms	Suzannah Cobb	Miss	Hannah Parish
Ms	Sarah Cochrane	Mr	Neil Procter
Mrs	Stephanie Cole	Miss	Helena Rawsthorne
Mrs	Claire Cresswell	Mr	Jake Richards
Mr	James Cutler	Mr	Stephen Roe
Dr	Matthias Daub	Miss	Charlotte Rowley
Miss	Louisa Dines	Dr	Xin Shu
Prof.	Susan Duthie	Dr	Amritlal Singh
Miss	Emily Feist	Mr	William Smith
Prof.	Christine Foyer	Mrs	Jane Thatcher
Dr	Mark Fletcher	Dr	Jens Tilsner
Dr	Ian Grange	Mr	Lewis Watt
Prof.	Lindy Holden-Dye	Mr	Alistair Wright
Mr	Luigi Gennaro Izzo		
Mr	Rory Jones		
Dr	Timothy King		
Miss	Emem Kingsley-Umana		

