

Impressions on the James Hutton Institute as a LEAF Innovation Centre

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17/11/17

Preface

This report was produced during a two week stay at the James Hutton Institute (JHI) in Dundee. This visit was enabled by the Macaulay Travel Fund, and a partnership between the James Hutton Institute, Scotland, and McGill University, Canada. My time at the JHI in Dundee was spent under the supervision of Geoff Squire. I am grateful to the Macaulay Travel Fund, to the James Hutton Institute, to McGill, and to Geoff for supervising me during my stay.

Introduction

Founded in 1991 LEAF is an organisation which aims to improve the sustainability of food systems and farming. LEAF has three primary approaches or ‘pillars’ through which it attempts to achieve improved sustainability in farming and food systems. These are 1) to facilitate sustainable knowledge generation and exchange to promote Integrated Farm Management; 2) to develop market opportunities; 3) to engage the public in sustainable food and farming, for example, through outreach programs such as LEAF Open Farm Sunday.

As a LEAF Innovation Centre, the JHI is primarily involved in knowledge generation and exchange for sustainable agricultural production. However, through projects like the Living Field and the JHI’s involvement in LEAF Open Farm Sunday and Technical Days, it has impact on the second and third pillars of LEAF. A large portion of the JHI’s involvement with LEAF is related to the four farms operated by the Institute. The two farms near Dundee, Mylnefield and Balruddery and the research done on them are particularly central to LEAF at the JHI. It is at these sites that the Open and Technical Days have historically taken place.

The impressions on LEAF at the James Hutton Institute were formed during a two week stay at the Dundee branch of the Institute. These opinions are based on conversations with numerous staff members in the agro-ecology and soil science research groups along with members of the farm and communication teams. Further to this, several members of staff closely involved with LEAF were interviewed using a semi-structured style to explore their opinions on matters deemed central to LEAF at the JHI. All of those interviewed work primarily at the Dundee branch of the JHI. Due to the short time frame in which this investigation was conducted there was inadequate opportunity to include researchers from Aberdeen. This may affect the findings as LEAF is much more active at the Dundee branch due to the proximity to the farms and the fact that the primary contact of LEAF at the JHI, Geoff Squire and the farm Manager Euan Caldwell are based in Dundee. The purpose of this report is to give an outsider’s impression of LEAF at the JHI and explore the opinions of those who regularly work with LEAF to inform how the Hutton Institute’s involvement with LEAF should progress.

Impressions

Aside from the people who work here, the biggest asset the James Hutton Institute has, relative to LEAF, is the four farms. These provide not only a foundation for research but also a platform with which to conduct outreach events such as Open Farm Sunday or the Technical Days. Several members of staff mentioned how important it was that the Hutton Institute owned these farms, as it allowed greater flexibility and freedom in research and outreach. A valuable asset is the diversity of farms, both in terms of production system and environmental setting. Because of this the Hutton Institute is in a somewhat unique position as a LEAF Innovation Centre to pursue research related to all aspects of Integrated Farm Management, LEAF's central ideology. The other LEAF innovation centres appear to focus their research efforts on one agricultural sector (with the exception of Bangor University in Wales). Due to the close ties to the farms and the proximity of Mylnefield and Balruddery, most of the work at the JHI related to LEAF seems to revolve around sustainable cropping systems, ecosystem health, Integrated Pest Management, and biodiversity. There is scope to directly relate more of the work done at the other JHI farms back to LEAF, to further promote the excellent work being done at the JHI and to integrate more research areas with LEAF.

It is clear that LEAF gets from the JHI, as an Innovation Centre, a platform for knowledge generation and exchange. When participants were asked what the JHI gained in return, answers included: access to the LEAF network and the opinions of farmers to inform research questions and the efficacy of proposed solutions, and a platform from which to demonstrate the work which is being done at the JHI. Staff at the JHI felt that one of the most valuable benefits which came to the JHI from being involved with LEAF was the potential to spread knowledge gained to farmers and the wider public through the LEAF network, and to receive feedback from farmers regarding proposed solutions. The efficacy of the LEAF network in this regard is clear with the popularity of the LEAF Open Farm Sunday and Technical Days at the JHI. This is clearly something that should be cultivated as the dissemination of scientific knowledge and application of new best practices is central to making progress in environmental and agricultural systems (Dicks et al., 2013; Hassanein & Kloppenburg, 1995). Further to this, involving the public with the work done at the JHI, through events such as the LEAF Open Farm Sunday and the Living Field Project (www.livingfield.co.uk) raises awareness of the work being done here. The importance of consumer awareness and subsequent actions as a driver for change in the pursuit of sustainable food systems cannot be overstated (Jacobsen & Dulrud, 2007; Lorek & Spangenberg, 2014).

During conversation with the various staff members, little mention was made of other LEAF Innovation Centres. This point was raised with those taken through the semi structured interview and they confirmed that there was little or no direct collaboration with other LEAF Innovation Centres. While there may be some connections between individuals at JHI and other LEAF Organisations there appears to be no formal connection between Innovation Centres. It was suggested that LEAF could provide more information on what research was ongoing at each innovation centre to raise awareness and enable partnerships. One participant of the interview portion of this study suggested a centralised set of research questions relevant to LEAF could facilitate collaboration between Innovation Centres. From an outsider's perspective this is something that could be improved. Strengthening the links between Innovation Centres to create a stronger research network would undoubtedly assist in the work towards sustainable agricultural and food systems. The onus here is likely on LEAF, as the central organisation, to facilitate these connections, although as a leading Innovation Centre the JHI could perhaps influence or expedite this process, should it be seen as desirable.

During conversation little was said of the Aberdeen branch of the JHI in relation to LEAF, aside from participation of individuals from Aberdeen during Open Farm Sunday and Technical Days. This lack of regular involvement with LEAF from the Aberdeen branch was considered by some interviewed to be an area which could be improved. This, from an outsider's perspective, is likely because most LEAF activities appear to be centred around the Dundee site and the Mylnefield and Balruddery farms. This coupled with the distance between sites likely makes collaborations time consuming and costly. Limited resources allocated specifically to LEAF was suggested to contribute to this. Further, during conversation it would appear that those most closely involved with LEAF are in the Agroecology group and the Dundee farms. It may benefit LEAF at the JHI if efforts are made to spread interest or involvement in LEAF throughout other Science Groups and departments. This could potentially be done through recruiting a LEAF "Ambassador" from each department, responsible for engaging the department in LEAF activities. This would obviously be subject to the interest and passion of those involved.

Finally, succession planning for LEAF may be something that is worth considering. As the bulk of the LEAF initiatives at the JHI appear to be driven by several passionate people, alongside their formal roles at the JHI, there may be a risk to the future of LEAF at the JHI should their situation change. This is apparently well underway on the farm side but when asked, it was less clear if the same was true for the academics involved with LEAF at the JHI. Whether there is scope to create a more formal position for someone to deal with LEAF at the JHI, particularly with regards to making connections with other Innovation Centres and facilitating research collaborations is something which could be considered. The provision of funding specifically for LEAF activities was suggested to be a limiting factor numerous times throughout conversations. It could benefit the JHI to set money aside for LEAF work, as the work related to LEAF appears significant in terms of raising the profile of the JHI, to the public and nearby farming community.

Conclusion

The work related to LEAF appears to be a significant feather in the Hutton Institute's cap. It allows scientists and farm staff to demonstrate the high quality and broad scope of work that is being done at the JHI. This is through the LEAF Open Farm Sunday and Technical Days, but also through submissions to various technical notes or leaflets for LEAF and general involvement with the LEAF Network. On the farm side, compliance with the various stringent LEAF certifications demonstrates the expertise and dedication of the farming staff. Whether more support should be provided by the Institute for LEAF activities is up for debate. While there are definite and substantial benefits in terms of publicity and knowledge exchange, the financial returns are less certain. It appears without doubt, however, that continued involvement with LEAF is nothing but a positive when it comes to raising the profile for the James Hutton Institute as a leading researching centre.

As this report was created in a very short time frame the number of people engaged was limited. Those spoken to and interviewed were all based at the Dundee branch of the JHI and are, for the most part, highly engaged with LEAF. This undoubtedly influences the impressions given throughout this report. It would be interesting to engage staff members who are less directly involved with LEAF and those at the Aberdeen branch to the Institute to gain a more well-rounded insight into LEAF at the JHI. This very preliminary look into how LEAF at the JHI functions, is my own opinion, based on conversations and then secondary semi-structured interviews with various members of the

JHI at Dundee. While the situation is undoubtedly more complex than presented here, I hope this report is of some use in highlighting some potential topics for future consideration.

References

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