

**University Research Committee Quality Assurance Review of Plant  
Conservation Unit (PCU) on 1 November 2016**

**External Reviewers' Report of the PCU**

Introduction

This is an excellent research unit which does high-quality research, facilitated by an enabling institutional environment. In the last five years they have demonstrated outstanding productivity with world-class content. We consider that an average of 8 medium-high impact papers a year is exceptional, and they and their students have also had extensive participation in conferences and workshops. There are many students in the unit and perhaps they are reaching capacity here. It is evident that the team has shown great examples of engaged scholarship and contribute to the University on multiple levels – lecturing, committees, research output, and social responsiveness.

We would like to highlight two particular achievements which seem to have come to fruition over the last five years. Firstly the work on the photo historical record has changed the research landscape in South Africa – providing a completely new way to assess land cover change. Secondly, the work on linking long-term environmental studies to inform conservation practice is bearing fruit with the publication of Lindsey Gillson's book. These works together with other outputs from the unit are influential in reframing conservation debates and approaches nationally and globally. In this report we summarise the unit's progress in various areas highlighted in the guidelines, and then discuss some general issues and suggestions for the next five years.

1. The coherence and focus of the research agenda:

The unit clearly has a very integrated research agenda – there is good overlap between researchers and substantial co-supervision with links to the broader Department of Biological Sciences and the Honorary Research Associates. The research agenda aligns sufficiently with the vision and mission – which has changed over the years to suit both the interests of the directors of the unit, and the changing socio-ecological issues in the Western Cape. They are clearly making efforts to fulfil the requirements of the trust by pursuing projects on both fynbos and plant conservation and this is in line with suggestion made in the last 5-yearly review.

2. The extent of local engagement and relevance:

The unit personnel seem to have chosen a course of focused engagement in a few areas – with the Paulshoek community, the Arid Zone Forum, the Leslie

Hill Succulent Karoo Trust, and working with SA National Parks. For such a small group this seems an appropriate way to maximise their impact. It would be nice to see interaction with Cape Nature on the same level as what has been achieved with SA National Parks.

3. In terms of how the unit relates to the current crisis at the universities and issues around decolonising the institution, we feel that the philosophy and research approach of the unit is quite progressive. We suggest that the unit try to be more explicit about how it is contributing towards transformation at UCT – which might help in forthcoming discussions with other academics and students. Particularly, there is a focus on recognising and integrating the knowledge that local farmers and people have into knowledge products and this could be highlighted with reference to how biology might start to address decolonisation.

The 5-year report claims to be “transformative” but doesn’t explicitly demonstrate this throughout 3

In terms of numbers we recognise that the PCU is making a concerted effort to include black South African and African students where possible. This aspect of transformation clearly needs to be strengthened throughout the university and the country and we encourage to you continue to have this as a priority – in particular in the hiring of post-docs as mentors for younger students.

4. Extent of quality linkages and networks

The unit has extensive networks at all levels. We are not suggesting that you expand these as it might stretch your capacity– but perhaps focus on the ones that are currently constructive (eg the strategic area biodiversity initiative within UCT). We regard the balance of strong South African links of Hoffman and the more international collaborative efforts of Gillson as entirely healthy and to be applauded.

5. Critical mass and evidence of sustainable financial practice

In this regard the unit seems totally on track. It is functioning fine as a unit and very sustainable. The finances seem fine – having secured income from the Leslie Hill trust seems to really help in terms of having some permanent research assistants. We suggest that you aim to continue to have a steady income stream but don’t expand unless you want to add more staff.

6. Evidence of effective governance management and planning (eg succession plan):

The group works well together. We support your idea of having regular planning meetings between the two directors – both as a way of keeping on top of current activities and particularly for long-term planning and strategic thinking. However, it is clear that by the end of the next 5 year period, more focus on succession planning will be needed.

General comments:

**Post-docs:** The post-docs clearly contributed in the last 5 years. We recommend that you continue efforts to attract them. There appear to be post-doc funds available from the URC, Claude Leon, and the science faculty for black south Africans. Achieving this would help with supervision of students and with providing a range of mentors for these students.

**Communication:** While we commend and encourage the scientific outputs of the unit we see a lot of value in communicating the type of work that you and your students are doing that would find resonance with a broad audience. The unit already does this through a range of channels but it could be further enabled by making use of the university communications department and avenues such as The Conversation. Social media could be used to showcase your students more.

**Paulshoek:** Having a book to demonstrate the outputs from the long-term investment in Paulshoek is a good idea. Perhaps look into linking this site to the DST ETFEON infrastructure grant to support further work there in the future.

**Human resources:** Perhaps think strategically about how you are going to support people who have participated in your research group and how you will enable their development (e.g. Marianna Lot in Paulshoek and the research assistants). It is the nature of academics that people move through and one way to demonstrate the “transformative” nature of the PCU is to keep track of where your colleagues/students have ended up – which you seem to do.

**PhD output:** The review group spent some time discussing issues regarding both the length of time PhD students were taking to complete their theses and encouraging academic output (papers etc) from these students (and former students). There was general sympathy for PCU as these are universal problems with no easy or obvious solutions. Queries were raised about keeping available the option of PhDs ‘by papers’ rather than by the conventional thesis route. It was acknowledged that this was not suitable for all students or all topics and was not necessarily a shortcut to paper production. However, it is suggested that it be more

widely discussed as an option for PhD candidates during the early part of their projects.

Emeritus Prof John Boardman

A/Prof Sally Archibald

6 November 2016