CONSERVATION BIOLOGY
continuous assessment
2019/20

PODCAST

"...conservation biologists need to be *much more strongly proactive in our approach to communicating, in formal educational settings as well as in other venues and via alternative methods to a diversity of audiences. Explaining and communicating our science to non-scientists should be one of our most important jobs...*"

Bickford, D., Posa, M. R. C., Qie, L., Campos-Arceiz, A., & Kudavidanage, E. P. (2012) Science communication for biodiversity conservation. *Biological Conservation*, **151**(1), 74-76.

The inclusion of student-created podcasts allows for more authentic assessment and helps to build evidence for a variety of skills in student's personal development planning (PDP) portfolios. Involvement in the creation of podcasts allows students to more thoroughly comprehend course material, promote deeper learning and achieve higher exam grades (Lazzari, 2009; Pegrum, Bartle & Longnecker, 2015). Being able to orally communicate in a clear and concise manner is an important skill for conservationists, but also important within many other professions.

Lazzari, M. (2009) Creative use of podcasting in higher education and its effect on competitive agency. *Computers & Education*, **52**(1), 27-34.

Pegrum, M., Bartle, E. & Longnecker, N. (2015) Can creative podcasting promote deep learning? The use of podcasting for learning content in an undergraduate science unit. *British Journal of Education Technology*, **46**(1), 142-152

Dr Andy Wakefield, 2020
University of Bristol

INTRODUCTION

Why podcasts?

Conservation biology is not just for biologists. Clearly biologists play an important role in understanding factors associated with biodiversity but it is in everyone's interest to seek to protect and perpetuate it.

As biologists we stand a better chance of accomplishing the aims of conservation biology if we can effectively communicate evidence from scientific work to non-specialist audiences. Doing so makes the scientific realm more accessible and arguably more engaging.

Communication takes many guises, with television and written articles being obvious examples. However, the podcast industry is growing as more people choose to listen to material 'on-the-go'.

During these practicals, and the associated tasks, you will learn how to produce two short podcasts, each on a separate topic. You will be working in pairs to research, plan, record and edit you own podcasts. You will receive lots of feedback on your first effort (ungraded) to use towards your second podcast (40% unit marks).

By the end of the practicals you should, with knowledge from lectures and independent reading, be able to:
- Explain why it is worth conserving biodiversity;
- Explain and debate solutions for conserving biodiversity;
- Recognise the inter-disciplinary nature of conservation biology;
- Communicate conservation issues using digital media.

~~listening~~ Pre-~~reading~~

Here is a selection of interesting environmental / conservation themed podcasts (clickable links) to start listening to in advance of the first practical.

Make some digital notes on things you liked as well as any ideas you have for making your own podcasts.

BBC Radio 4:
Costing the Earth

BBC Radio 4:
Shared Planet

RSPB Podcast:
Nature's Voice

Sustainability
Defined: Natural
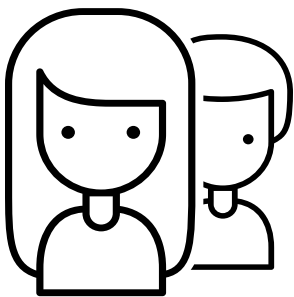Environment

Farmerama:
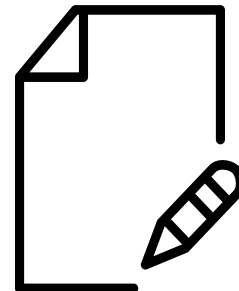conservation
agriculture

Mongabay
Newscast

The Process

You will be working through this flowchart to create your podcasts, see the following pages for more information

Meet your partner & practice

Review scientific research

Write your script

Record & upload audio

Edit & export audio

Submit mp3 and PDF

Meet your partner

You will work in pairs to create your podcasts. You have been randomly assigned a partner for your first (formative) podcast, but will be able to chose your own partner for the second (summative) podcast. You must work with a different partner for each podcast.

Review scientific research

You may already have some ideas from lectures and/or your own readings about the topics chosen for each podcast. You should begin by discussing how you and your partner will conduct background research on the topic. Initially, it would be a good idea to spend some time creating a mind-map of these ideas.

Your next stop is the scientific literature. You may find the following resources useful for the first and second topics respectively:

Palm oil and biodiversity - IUCN

IUCN SSC (species survival commission) guiding principles on the use of trophy hunting as a tool to create conservation incentives

Write your script

Once you have gathered sufficient evidence you should start writing a script for your podcast. Many professional podcasts are accompanied by a written transcript for greater accessibility of their material (e.g. so their resource is accessible to people with hearing and/or language difficulties).

This script should match the narration / interviews heard on your exported audio file **word-for-word**. In our case, **you must also include within-text citations** for claims you are making, and a **corresponding reference list** at the end of the document. Once submitted to Blackboard we will upload your script to Turnitin where it will be checked for plagiarism.

Look at the feedback you received for your Key Concepts essay, Science and Success report and at your Evolutionary Biology coursework for comments on how to reference correctly on your script. You should use author and date referencing (e.g. Harvard style), not numbers (e.g. Vancouver).

Your podcasts should be created for a general public audience. Listeners will have an interest in natural history and the environment, but are unlike to have any formal scientific training (e.g. a biology degree) and certainly no specialism in conservation biology.

Record & upload audio

You can record audio files using your phones, tablets or laptops. During practicals you can also use the laptops in the teaching labs. When available, you can also use computers around campus (although make sure you consider the impact of background noise on your recordings, as well as the impact of you speaking to other users in communal spaces). **Please record all of your audio files in MP3 format** as this will make editing and uploading easier.

Phones / tablets

You will need a microphone app to record audio files onto your phone.

Your phone may already have one of these apps pre-installed. If not, then there are many free microphone apps available to download from the App Store or Google Play.

These apps will work fine with the internal mic on your phones, but using a plug-in external mic is likely to improve the audio quality of your recordings.

We have a number of headsets (compatible with phones and computers) designed to enhance the quality of recordings and playback relative to internal mics and speakers. We have enough of these for one per pair. You are allowed to take these off-campus but will need to sign them out with teaching staff first.
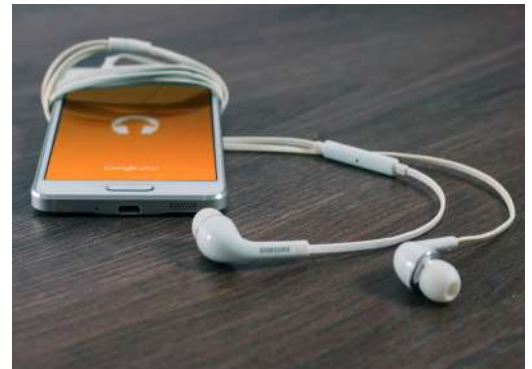
Computers

If, between your pair, you don't have a suitable phone, or would prefer to record audio direct to a computer you will still need to ensure you have some software installed to enable you to do so. The easiest tool to use in this scenario is 'Audacity', as this is free to download and is also the software which you will be using to edit your audio clips (see below).

For student pairs who do not own a smartphone or other audio recording device, we have a small number of 'dictaphones' which can be borrowed.

Edit & export audio

AUDACITY

Audacity has already been installed on the computers in the teaching lab and in the LSB computer room. If you would prefer, you can also download a free version onto your own computer from: www.audacityteam.org

The software includes many more features than you will need to create an excellent podcast, so don't worry if you don't understand all of the options available. There are many tutorials available online as well as lots of information on the audacity website.

For starters, here's is a link to the first of a series of 14 online tutorials for newcomers to Audacity. If possible, I recommend that you watch the tutorial on one computer/phone screen while simultaneously working with Audacity on a parallel screen.
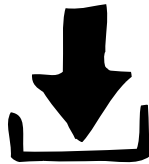
Here are a couple of links to websites where you can find free sound effects and royalty-free music. Make sure you make reference any material used in either of your podcasts. Do this by including the **title** of the track, the **artist,** the **source** and the **licence** in an obvious section at the end of the reference list you include in your PDF script.

See this WIKI for examples of how to do this properly.

Submitting your attempt

Formative instructions

Once you have successfully exported your podcast, **one of your pair needs to upload two items** to Blackboard for marking:

MP3 - for marking

PDF script - for plagiarism checking

Both files should be uploaded to the 'Formative Podcast' group assignment submission point, which can be found under the 'Assessment, submission and feedback' menu item within the Conservation Biology 2019 course.

The deadline for both of these submissions is **Friday 7th Feb @ 1pm.**

If you haven't uploaded **all of your work** by the deadline then you will miss out on important feedback designed to help you improve for the summative podcast. In other words, your work won't be marked.

- -

Summative instructions

Again, **one of your pair needs to upload two items** to Blackboard for marking:

MP3 - for marking

PDF script - for plagiarism checking

Both files should be uploaded to the 'Summative Podcast' group assignment submission point, which can be found under the 'Assessment, submission and feedback' menu item within the Conservation Biology 2019 course.

The deadline for both of these submissions is **Friday 6th March @ 1pm.**

If you haven't uploaded **all of your work by the deadline then late penalties will apply to both students in the pair**.

The duration limit of this podcast is 8 minutes, exceeding this will incur penalties as follows:
   1-48 seconds over = 10 mark deduction;
  49-96 seconds over = 20 mark deduction;
  97-144 seconds over = 30 mark deduction;
  >144 seconds over = mark of 0 for attempt.

Feedback

Your first podcast will be <u>marked but not graded</u>. The purpose of this is to provide you with an opportunity to 'have a go' at a new skill, practice, make mistakes, and receive written feedback prior to completing a second, more in-depth podcast on a separate topic (see practical 2).

You will receive feedback on your first attempt by **Thursday 20th February**. This is the same date as our second practical session. During this session you will engage with the marking criteria and listen to some podcasts produced by last year's cohort. This task, together with marker comments on your own attempt, will provide you with plenty of useful feedback to refer back to when creating your second podcast.

Your second podcast will be <u>marked and graded</u>. The feedback on this attempt will largely consist of a justification of the mark, with a few concise additional comments. This feedback is due on **Friday 27th March**.

Title:

Should consumers boycott palm oil for biodiversity?

Podcast duration: 5 minutes

Tasks for today

✓ During this first practical please watch at least the first six of the Audacity tutorials linked on p.8.

✓ Using this guidance, your challenge for today is to create a 40 second audio clip describing your favourite dinner meal and why you love it so much! Make sure the clip has a suitable introduction and ending and includes some backing music.

✓ You will have one hour to create and export this audio file. Please export this to your One Drive as an MP3 and be prepared to play your finished product to your partner.
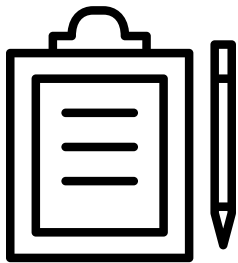
✓ Once you have finished this you have the remainder of the practical to work in your pairs start reviewing relevant scientific research and to start writing your script (see page 6).
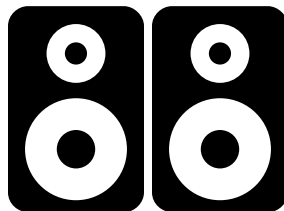
Practical 2

Review & feedback

If possible, please bring your own headphones for this practical
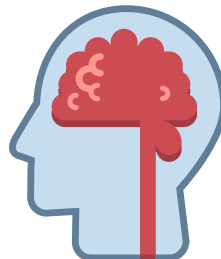
Generate marking rubric

Listen to 2 podcasts

Complete feedback

Listen back to your own podcast

Digest feedback

Discuss podcast #2 (new pairs)

Practical 2

Peer review and feedback

Please sit anywhere in the lab, but make sure you are next to your podcast partner from practical 1.

Active engagement with the feedback process

"*students should be trained in how to interpret feedback, how to make connections between the feedback and the characteristics of the work they produce, and how they can improve their work in the future*"

(O'Donovan, Rust and Price, 2016, p.940)

To help you make the most of your feedback, and therefore to perform well in the next podcast task, we want to get you actively engaged in the feedback process. An excellent way to do this is to provide you with opportunities to gain the perspective of the marker. With this in mind, we want you to have a go at completing a marking rubric (you will be provided with a paper copy).

To make the most out of this exercise please try to do this **WITHOUT** looking at the wording in the marking criteria at the back of this booklet. You'll only be cheating yourself if you do! Please complete this form in your pairs, discussing between you what you think should appear in each of the blank boxes.

Marking rubric

Practical 2

Listen to other podcasts & provide feedback

We have uploaded three podcasts to Blackboard that were created by last year's students. We want you to **pick two of these to listen to** (you can listen to the third later/after the practical). After each podcast take some time to use your marking rubric to complete a feedback form (available on Blackboard > Practicals) for each of the podcasts you listen to. Please download this template and conduct this exercise in your pairs. Use the time to discuss which rubric boxes should be circled and what comments should be left below. You should have at least 3 completed feedback forms by the end of the practical.

Listen back to your own podcast

After you have listened to the range of exemplar podcasts and completed the feedback forms above, you will be in a better place to reflect on your own podcast.

By **producing** peer feedback, rather than simply receiving it, you will be activating your brain in a way that allows you to more fully evaluate your own work (Nicol *et al.*, 2014). Learning experts talk about this internal feedback as *'inner feedback'* which should act alongside the *'external feedback '* you receive on your work.

Please navigate Blackboard to find your formative submission attempt and listen back to your effort. Give yourself some feedback in the same way as before.

Look at your 'external feedback'

You're now in a good position to reflect on the feedback that has been written for you on your original attempt. Go ahead and find this on Blackboard by navigating through the MyGrades section.

- Take a while to read through and digest this information.

- Look at this in conjunction with the marking criteria we have included at the end of this handbook (note: this will probably be very similar to the rubric you just completed, although not identical [unless you cheated!]).

- Identify which specific aspects you wish to improve on for the next podcast task.

- Discuss with your partner anything that you would do differently if you were to repeat this task together. For instance, could you: conduct research earlier; record your audio in quieter environment; communicate better?

Take all these nuggets of feedback with you when you form your new partnership for podcast #2

Title:

Should conservation organisations support the idea of trophy hunting?

Podcast duration: 8 minutes

Now it's time to use: (1) the skills you learnt whilst making the first podcast; (2) your '*inner*' and '*external*' feedback for your first attempt; (3) your own focused notes for improvement. Use all of this alongside the various concepts and themes you've learnt about during this unit to produce an 8 minute podcast entitled: '*Should conservation organisations support the idea of trophy hunting?*''.

We're expecting inclusion of relevant content (themes / concepts) from lectures as well as inclusion of content from your own independent reading.

This time you will be working in new pairs and can self-select your partners. You cannot work with the same partner as before. If you are struggling to find a partner please contact one of the teaching staff who can help pair you with somebody else.

There are no further practical classes, so you will need to organise between you when to meet up, conduct research, record and edit your podcasts.

Marking Criteria

Conservation Biology Podcast Marking Criteria 2019/20

Knowledge (25%)	Fail	Incomplete knowledge, with major omissions and multiple errors. Contains substantial amounts of irrelevant or tangential material	Partially adequate depth of knowledge but contains several minor errors/omissions, or a few larger ones. Contains some irrelevant or tangential material	Good depth of knowledge but may contain some minor factual errors and/or omissions. May contain some irrelevant or tangential material	Very good depth of knowledge, largely free from factual errors	Outstanding depth of knowledge, free from factual errors
Argument and Understanding (25%)	Fail	Underlying concepts not explored, weak development of ideas	Underlying concepts not fully explored. Argument indicates limited understanding	Underlying concepts partially understood. Adequate synthesis of material, argument indicates limited understanding	Very good understanding of underlying concepts and synthesis of material across the unit. Some evidence of independent thought and critical ability	Excellent understanding of underlying concepts and synthesis of material across the unit. Plenty of evidence of independent thought and critical ability
Communication (25%)	Fail	Not holding the audience's attention. Incorrect use of technical vocabulary and specialist terms not properly explained	Satisfactory use of audio medium, but ineffective at times. Suboptimal choices concerning use of technical vocabulary and these terms were not properly explained	Appropriate style in use of audio medium, but with little originality or creativity. Technical vocabulary largely accurate and mostly well explained	Some evidence of artistic merit, with aspects of originality/creativity. Excellent use, and explanation, of technical vocabulary	Evidence of striking artistic merit, with considerable originality/creativity. Outstanding use, and explanation, of technical vocabulary
Editorial ability (25%)	Fail	Imbalanced in structure and more serious editing mistakes, e.g. inaudible sections. Transcript submitted but no references included	Adequately balanced in terms of content and time allocation. Some basic editing errors, e.g. imbalanced levels. Basic referencing errors within the written transcript	Well-balanced in terms of content and time allocation. Minor errors within the editing, e.g. word stumbles and background noise. Good referencing within written transcript, but a few mistakes	Very well-balanced in terms of content and its time allocation. Only very minor editing tweaks needed. Almost perfect referencing within written transcript	Perfectly balanced in terms of content and time allocation. Outstanding presentation. Perfect referencing within written transcript

Formative Feedback

Start	**Stop**	**Continue**
Things you didn't do for you formative effort, but which you should consider doing for your summative podcast (they will make your next effort even better).	**Things you did do for you formative effort, but which you should stop doing (they weren't so great!).**	**Things you did well for you formative effort, and therefore you should continue to do for your next attempt.**

Summative Feedback

Frequently Asked Questions

Do I need to format the audio file as a proper podcast?

- Professional podcasts consist of an audio file and an associated file which contains metadata such as the author(s), contents, a logo etc. You only need to produce an MP3 and then upload this, with your PDF script, to Blackboard.

What are the restrictions on interviews?

- You'll notice from the pre-listening links that most decent podcasts include interviews with subject experts. It might be a good idea to include interviews yourself but please do this in a mock-fashion, whereby one of your pair is the interviewer and the other pretends to be the expert. The only people to talk on your podcast should be you and your podcast partner.

Do we work in the same pairs?

- You will work in pairs for both podcast assignments, although you will work with a different partner for each. You will be randomly assigned a partner for the first podcast then be able to choose your partner for the second podcast. By doing so, you will have double the quantity of feedback from the formative podcast (yours and your new partner's) that you can use towards making your second (summative) podcast - amazing!

How many practical classes do we have?

- Two timetabled sessions:
(1) 9:00-12:00, Thursday 30th January;   (2) 15:00-17:00, Thursday 20th February.
Both are in the LSB teaching lab.

How many pieces of work do we need to upload?

- Two for both the formative and summative podcasts. You need to submit one copy of your MP3 and one PDF per pair. It's best for one of you to submit both files at the same time but for both partners to be be present to witness this to make sure that the work has been correctly submitted (remember that any penalties will apply to both of you).

How much are the podcasts worth?

- formative podcast = nothing towards unit mark.
- summative podcast = 40% of unit mark (the rest comes from your exam).

What can I do if my partner is not participating?

- There is a form which you can submit if: (i) you think your partner has not been engaged enough during the summative podcast, or (ii) your partner has suspended studies whilst the assessment is taking place. Click on this icon to access the form