```
00:43:09
                Karina Townsend:
                                        Hi from East London.
                Mona Doss-Spencer (Wildlife Acoustics): Welcome from Boston!
00:43:41
                                Good evening from York, North Yorkshire, UK
00:43:46
                Dean Waters:
00:43:51
                fran tatterall: Hi from the Cotswolds in the UK
                                        Hello - Chris here in Wales
00:43:59
                Chris Pierpoint:
00:44:07
                Tara Beckman:
                                Hello from Southern California!
                judit szabo:
                                hi from brazil
00:44:08
                Charlotte Dunn: hello from The Bahamas
00:44:09
                                        Hi from North Devon, UK
00:44:10
                Samantha Spears:
00:44:10
                Sue Morgan:
                                Hi from Suffolk, England
                Hairul Masrini Muhamad: Its Hairul from Malaysia
00:44:10
                RUdiger Ortiz: Hello from Madrid, Spain!
00:44:13
00:44:13
                Andrew Fairbairn:
                                        Hello from Germany
                                Hi from Dresden, Eastern Germany
00:44:15
                Frank Dziock:
                                        Vrhnika, Slovenia, checking in
00:44:16
                Jernej Polajnar:
                                Hi from Lismore, Australia
00:44:18
                Rob Garbutt:
                Carlos Iglesias-Merchan:
                                                Good night from Spain!
00:44:21
00:44:23
                Carlos Araújo: Hi from Brazil
                Mike Kearsley:
                                Greetings from Grand Canyon!
00:44:23
00:44:23
                Robert Manzano: Evening from Catalunya, Spain!!
                Mohammed Ismail Mohamed Rafi:
00:44:25
                                                Hello! Mohammed from Oxford
                Dr. Bryan Pijanowski:
00:44:26
                                        Hello from sunny Indiana! :)
                Jordan Howard: Hi from Ontario, Canada
00:44:28
                Jeff Hines:
                                Hi from Canada!
00:44:32
00:44:33
                Erick Ocaña:
                                Hi, Erick from Veracruz, Mexico
00:44:33
                joni palmer:
                                Hello from Albuquerque!
                                Hint: select "all panelists and attendees " to share
00:44:36
                Ian Agranat:
with everyone - rather than just the speakers...
                Anthony Aboumrad:
                                        Hello from Santa Rosa, California!
00:44:37
00:44:39
                CINDY STAICER:
                                Hi from Nova Scotia, Canada
                                Hello from snowy Missoula Montana!
00:44:39
                Debbie Leick:
                Marc Green:
                                Good Evening from Manchester England :)
00:44:40
00:44:40
                Kelly Kahukiwa: Kia ora from Aotearoa (New Zealand)
                Bryan Crunden:
                                Hello from Colchester, UK
00:44:41
                                Hello from British Columbia Canada
00:44:47
                Jeff Matheson:
                Albert Aguiar:
                                Hello, Albert from Brazil =)
00:44:50
                dhanusha kawalkar:
                                        Hello everyone! Dhanusha from India :)
00:44:52
                Brian Hendrix:
                                Hello from Nashville, Tennessee!
00:44:52
                Alex Milne:
                                Greetings from Massachusetts
00:44:56
00:44:57
                Megan Sullivan: Good afternoon from Connecticut, USA
                Edward Harland: Hi, Ed from Dorset, UK
00:44:58
00:44:58
                Hugo Belly:
                                Hello from Toulouse, France!
                Supun Galappaththi:
                                        Hi from Sri Lanka!
00:44:59
                Ron Chen:
                                Hi from Israel!
00:45:01
                Renata Sousa-Lima:
                                        Good afternoon
00:45:01
                                                Hi Albert, nice to see you;)
00:45:02
                Cristian Pérez-Granados:
                Alison Styring: Hi from Olympia Washington USA!
00:45:04
                Renata Sousa-Lima:
                                        from Brazil
00:45:08
00:45:11
                Marco Ortiz:
                                Hello from Mexico!!!
```

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00:45:12
                Steve Moon:
                                Hello from Iowa
                Christine Gabriele:
                                        Hello from Glacier Bay National Park, Alaska
00:45:13
                Luke Strugnell: Hi from a warm evening in South Africa
00:45:15
00:45:19
                Carlos Abrahams:
                                        Hi from Derbyshire in the UK
                                Greetings from Tallahassee, FL
00:45:22
                David Cook:
                Craig Hood:
                                Hello from New Orleans ない
00:45:22
                                        Hello from Pretoria, South Africa.
00:45:23
                Caroline Lotter:
00:45:23
                Jill Tengeres:
                                Hello from Oregon!
                Steve Horton:
                                Hi from the UK
00:45:26
                John Brazner:
00:45:27
                                from lovely Black Rock Nova Scotia
00:45:29
                Matthew Hane:
                                Hello from sunny Eugene, OR
00:45:29
                Laura S:
                                Canada!
                Rony Garcia Anleu:
                                        HI from Guatemala
00:45:30
00:45:32
                Michael Lynch:
                                Hi from Marvland
00:45:33
                Ivan Samayoa:
                                Hello from El Salvador
00:45:33
                Harold Mills:
                                Hi from Ithaca, NY!
                                Hello from Pittsburg, Kansas, U.S.!
00:45:33
                Halev Price:
00:45:37
                Mark Heerden:
                                Greetings from Cape Town, South Africa
00:45:37
                Albert Aguiar:
                                Good to see you, Cristian!
                Heidi Neilson:
                                Hi from NYC!
00:45:42
00:45:45
                Claudius Kerth: Hi from Leipzig, Germany
00:45:47
                Samuel Ross:
                                Dublin Ireland, checking in!
                                Hi from Sue Gould in New South Wales, Australia
00:45:47
                Sue Gould:
                                Hi from Puerto Rico in the Caribbean
00:45:48
                Omar Monzon:
                                Hello from Brazil
00:45:49
                Ivan Campos:
00:45:50
                Matthew Mitchell:
                                        Hi from Vancouver, Canada!
00:45:51
                Dr. Bryan Pijanowski:
                                        Mars? What does it sound like there?
00:45:53
                Jeff Wells:
                                Hi all from Maine, USA
00:45:56
                Rose Keller:
                                Hei from Lillehammer Norway! And formally of Denali
Alaska. Hey GBNP!
                Anne Clark:
00:45:57
                                Hi from upstate NY
                Viral Joshi:
                                Hi every one Viral Joshi from IISER Tirupati India
00:45:58
                Stephen Docker: Hi from Derbyshire UK
00:46:01
00:46:04
                Leigh Richards: Greetings from Durban, South Africa
                                Hi from Chester, UK
00:46:08
                Leah Williams:
00:46:11
                Ellen Murphy:
                                Hello from the Grand Canyon NP!
                Shannon Mendia: Hello from San Diego, California, USA
00:46:14
                Victor Matasov: Greetings from Moscow, Russia.
00:46:18
                SUYASH SAWANT:
                                Hi, Suyash from India
00:46:34
                Tharaka's Galaxy M11:
                                        Hello from Sri Lanka
00:46:37
00:46:40
                Fabiano Melo:
                                Hi people, Fabiano Melo, from Brazil!
                                        Hello from Elkton, Oregon, USA.
00:46:42
                Madrone Ruggiero:
00:46:43
                Ines Moran:
                                Hi everyone, Ines from Eugene, US
                Tessa Rhinehart:
00:46:54
                                        Hello from the Kitzes Lab in Pittsburgh,
Pennsylvania
                Richard Stein: Asteroid c-7869
00:46:57
                Josep Vidal O+: Hi from Catalunya
00:47:01
                                        Hello from Belem, Brazil!
00:47:12
                Leonardo Trevelin:
                Liliana Ferreira:
                                        Hello, I'm Liliana from Portugal.
00:47:20
00:47:21
                Jessup Weichelt:
                                        Hello from Wisconsin, USA
```

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00:47:21
                Francisco Fonturbel:
                                        Hello everyone! Greetings from Chile
                David Hill:
                                Helllo from Vancouver Island, Canada
00:47:25
00:47:33
                Garrett Savory: Good morning from Fairbanks, AK
                Andrea de Moura Milanelli:
00:47:35
                                                Hi from Brazil!
                Maria Armour:
                                Hello from Bridgewater State University in
00:47:36
Bridgewater, MA, USA
                                        Hello from the Peak District National Park
                Paul Howden-Leach:
00:47:41
00:47:41
                Hanika Cook:
                                Hi from Davis, California
                Paul Meulenbroek:
00:47:44
                                         Servus from Vienna, Austria!
                                        Hi from Costa Rica
00:47:45
                Monica Retamosa:
                Kimberly Fake: Hi All, from Chicago Illinois USA
00:47:45
                Jenny Nehring: Hello from Monte Vista Colorado
00:47:46
                Rebecca Lewis: Hi from the UK!
00:47:48
                Muhammad Muhajir Hasibuan:
                                                Hello nice to meet you all, I'm from
00:47:52
Indonesia
                Jana Vokurkova: Greetings from Prague, Czech Republic!
00:47:53
                                        Hi from Florianópolis, Brazil!
00:47:57
                Patricia Serafini:
                Tainã Lucas ANDREANI:
                                        Hi from Goiás, Brazil
00:47:58
00:48:10
                Lars Korslund: Good evening everyone from rainy Norway!
00:48:10
                Vanesa Serafini:
                                        Hi from Argentina!
                                Hi from Yorkshire, UK
00:48:11
                gesa reiss:
                                Greetings from Slovakia!
00:48:16
                Juraj Svajda:
                Tamires Fernandes:
                                        Hi from Brazil!
00:48:18
00:48:24
                Zephyr Gold:
                                Greetings from San Diego!
00:48:28
                Tara Beckman:
                                Any fellow UC Davis student/faculty/alumnis?
00:48:30
                martin ruane:
                                hello from Naval Base Ventura County, California
00:48:34
                Peter Brooks:
                                Hello from Peter in Sheffield UK
                Hanika Cook:
                                Go Aggies!
00:48:38
                Fabiano Melo:
                                Very excited!!!!
00:48:47
                Tara Beckman:
00:48:54
                                yess! go Ag!
00:48:58
                Jessica McCordic:
                                         Hello from Bridgewater, Massachusetts!
00:49:06
                Jenni Morgan:
                                Hello from Gloucestershire, UK!
                Francinie Guido:
                                        Hello from Costa Rica!
00:49:24
                                Hi, from Albany, Western Australia :-)
00:49:35
                sarah comer:
                Niamh Carmichael:
                                        Hi from Belfast! :)
00:49:35
                                         Hi from New Mexico, in the Rio Grande valley
                Taffeta Elliott:
00:49:41
00:49:53
                Eric Schrder:
                                West Virginia, USA in the house
00:50:01
                Léa Bouffaut:
                                Hi from Trondheim, Norway!
00:50:15
                Gilberto Chavez-Leon:
                                        Hi from Mexico City
                Renata Platenberg:
                                         Hello from the Virgin Islands!
00:50:18
                                G'day from Alice Springs!
00:50:32
                Mark Carter:
                Gabriel Cahalan:
                                        Hi from Maryland
00:50:34
                Karina Townsend:
                                        Hi from Maryland East London!
00:50:48
                Robyn Shea:
                                Hello from Santa Rosa Island, California.
00:51:05
                Penelope Fialas:
                                        Hi from Bristol, UK
00:51:51
00:52:16
                Renata Sousa-Lima:
                                        nice
                Ines Moran:
                                Nice!
00:52:22
00:52:32
                KAVITA VERMA:
                                 Hello from New Delhi, India.
```

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00:52:43
                Rogério Grassetto Teixeira da Cunha:
                                                        Hi from Brazil
                Renata Sousa-Lima:
00:52:50
                                        ei Rogerio!
00:52:53
                KAVITA VERMA:
                                It's 12:30 a.m. here!!
                                        Hi from Istanbul, Turkey
00:53:01
                Enis Berk Coban:
00:53:05
                Fabiano Melo:
                                Super Rogério Grassetto is here
                Richard Stein: you mean 12:10?
00:53:13
                Rogério Grassetto Teixeira da Cunha:
                                                        Ei Renata, bem empolgado
00:53:15
aqui
                                Sorry can't see the poll?
00:53:31
                Sue Morgan:
                                Greetings from the Nature Sounds Society
00:53:32
                Dan Dugan:
headquarters in San Francisco. Dan Dugan here.
                Ragil Yoga Mandhala Wicaksana: Hello from Yogyakarta, Indonesia
00:53:49
00:54:13
                Renata Sousa-Lima:
                                        we cannot see the polls
                Rogério Grassetto Teixeira da Cunha:
00:54:14
                                                        Hey Bião!
                                How to access the poll please?
00:54:18
                Sue Morgan:
00:55:05
                KAVITA VERMA:
                                it'll come on your screen.
00:55:06
                Hanika Cook:
                                The poll should pop up in a new window over the
video
                L. Andrusiak:
                                no poll window is opening
00:55:30
00:55:34
                Sue Morgan:
                                Hi sorry we couldnt see poll
00:55:42
                Katie Teets:
                                I'm viewing in browser, maybe that's why
                Leonardo Trevelin:
                                        Couldn't see it
00:55:55
                Karina Townsend:
00:55:58
                                        I'm viewing via Zoom app and could see the
polls.
00:56:06
                Fabiano Melo:
                                Yeap
00:56:13
                Ivan Samayoa:
                                Yes
                Tainã Lucas ANDREANI:
                                        coudn't see it too
00:56:44
01:11:09
                Renata Sousa-Lima:
                                        this is brilliant
                Karina Townsend:
                                        Agreed!
01:12:47
01:13:33
                Jana Vokurkova: so beautiful diversity
                                        Currently I'm using acoustic indexes to
01:13:54
                Roberto Vargas Masís:
characterize of soundscape associated to the bird community as a proposal for the
establishment of an Interurban Biological Corridor in Costa Rica. If some of you can
collaborate with this form will be very useful for us to take in count your
experience and opinion https://bit.ly/acousticindexes_cbi_english
Thanks!
01:16:57
                Karina Townsend:
                                        Thank you this is great.
01:17:21
                Craig Hood:
                                Ribbon visualizations are incredible!
01:21:14
                Hairul Masrini Muhamad: Did anyone catches the paper mentioned just
now?
                Andrew Fairbairn:
01:21:25
                                        anyone have a link to that paper?
01:22:32
                Simon Butler:
https://www.sciencedirect.com/science/article/pii/S1470160X19308398?casa token=H-SuW
jvGzjkAAAAA:vEqmIqwTI-17NOJxc1-j-SDEKOi9r1cWxbzX9Y4GrNm5QsFSx5jaTCFp2sLUTbDgUwh Ffbl
G4w
01:22:49
                Thiago Bicudo:
https://www.sciencedirect.com/science/article/pii/S1877050914002403
                Andrew Fairbairn:
                                        Thanks!
01:22:50
01:23:07
                Matheus Mancini:
                                        Thanks Simon!
```

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01:23:19
                Hairul Masrini Muhamad: Thanks!
                Viral Joshi:
                                thanks Simon thats great help
01:23:25
                                Francomano, D., Gottesman, B. L., & Pijanowski, B.
01:23:29
                Rose Keller:
C. (2020). Biogeographical and analytical implications of temporal variability in
geographically diverse soundscapes. Ecological Indicators, 112, 105845.
01:25:59
                Sunil Kumar:
                                Hi, I have gone through Dr. pijanowski, Almo Farina
and Dr Jerome Sueur's papers but could not grasp how to calculate ACI and other
indices. Can anyone give me some pointers? PS- I am not familiar with R.
                Dr. Amandine Gasc :
                                        Do you know python?
01:26:23
                Jana Vokurkova: Nadia Pieretti papers
01:26:48
01:27:08
                Sunil Kumar:
                                Sorry I don't! More into biology than computers
                                        You can use Kaleidoscope Pro
01:27:26
                Carlos Abrahams:
                Sunil Kumar:
                                Read Pieretti as well but all in vain
01:27:39
01:27:52
                Dean Waters:
                                Any R packages for doing this?
01:28:12
                Carlos Abrahams:
                                        seewave the main one
                                I have to go, folks... Have a nice meeting
01:28:24
                Fabiano Melo:
                Alison Styring: I use "Sound Analysis with R" by Sueur and it's
01:29:26
useful.
01:29:42
                Sunil Kumar:
                                @Dr. Gasc...looking forward to that
                Sue Morgan:
                                Thank you
01:30:26
01:30:27
                Penelope Fialas:
                                        Thank you very much!
01:30:30
                Renata Sousa-Lima:
                                        Thank you so much Dr Towsey!
01:30:36
                Andrew Fairbairn:
                                        Fantastic. Thank you!
                Sunil Kumar:
01:30:37
                                Thanks Dr. Gasc
                Viral Joshi:
01:30:38
                                Thanks you
01:30:44
                Lars Korslund:
                                Great! Thank you so much!
01:30:45
                Sarah Obaid:
                                Thank you, that was great
01:30:49
                Christine Gabriele:
                                        Thank you! Those ribbon plots, wow!
01:30:51
                Karina Townsend:
                                        Thank you Dr Towsey. Really thought
provoking.
                Liliana Ferreira:
                                        Thank you so much, its amazing and
01:30:53
beautiful, and so useful.
01:31:11
                Ines Moran:
                                Thanks for such a wonderful talk!
01:31:14
                Diego Llusia:
                                In www.rug.mnhn.fr/seewave you can find a nice
documentation about the seewave R package
                                        Thank you for your knowledge Dr. Towsey!
01:31:15
                Matheus Mancini:
                                Alison I think you mentioned this book thank you!
01:31:24
                Laura S:
https://www.springer.com/gp/book/9783319776453
01:31:30
                Carlos Araújo: Time is short! :)
01:31:41
                William Carvalho:
                                        Thank you! Amazing talk! :)
01:32:13
                Alison Styring: @Laura, thank you for the link. Yes that's it!
                                Also check "soundecology" R package
01:32:29
                Diego Llusia:
                Sunil Kumar:
01:34:13
                                Thanks Diego, Laura and others!
                Megan Sullivan: Who was the name he just mentioned that combined
01:35:01
camera traps + acoustic monitoring?
                                If you are at a University your library should have
01:35:17
                Laura S:
a site license to that book so you can download it as a pdf.
01:35:35
                Viral Joshi:
                                liz I think
                Thiago Bicudo: Pairing camera traps and acoustic recorders to
01:35:47
monitor the ecological impact of human disturbance
```

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01:36:07
                Laura S:
                                Thiago how are you doing that?
01:36:45
                Omar Monzon:
https://www.sciencedirect.com/science/article/pii/S2351989418303573
                Victor Matasov: Thanks! Very impressive!
01:36:46
                Megan Sullivan: Thank you!!
01:36:55
01:38:21
                A. Gasco:
                                @Thiago Bicudo which human sounds would you be
interested in detecting?
                Yoba Alenga:
                                @Thiago can you share your e-mail adress? There are
01:41:34
some questions you may help me
                Thiago Bicudo:
                                @A.Gasco, I was citing the paper using cameras trap
01:42:14
and acoustic recorders
                                cool. thanks.
01:43:01
                A. Gasco:
01:48:57
                Tara Beckman:
                                I've got to head to *virtual* class now, but it was
wonderful listening in!! Bye now, and thank you!!
                                Concept of "umwelt" as proposed by von Uexkull early
01:52:14
                Anne Clark:
last century is perhaps the best umbrella term for the species-specific or culture
specific sensory-bounded world.
01:53:08
                Renata Sousa-Lima:
                                        good point Anne
                                You should be able to grab with your mouse the space
01:54:05
                Ian Agranat:
between the screen and speaker and change size to make one bigger or smalelr
01:54:48
                Laura S:
                                Ah like morphospecies but for sound!
01:54:53
                Laura S:
                                Super cool :)
01:55:33
                Gabriel Cahalan:
                                        Is anyone aware of a tool to make the long
visualizations-the false color spectrograms from indices? R package or?
                Matthew Casali: ^I'm also interested in that
01:55:59
                                looked like it was his own software when he first
01:56:12
                Megan Perra:
published, not sure if it's changed
                                        im interested in that too ^
01:56:19
                Helen Whitehead:
01:56:34
                Kathv Hodder:
                                @Anne Clark - that is a useful word!
                Carlos Abrahams:
                                        I think it's "Ecoacoustics Audio Analysis
01:56:46
Software v18.03.0.41" download from Zenodo
                Jernej Polajnar:
                                        Umwelt actually refers to the animal's
01:57:08
complete sensory representation of its environment, not just sound
01:57:16
                Jernej Polajnar:
                                        (just to be precise)
01:57:32
                Karthik Ashok: Try this -
https://github.com/QutEcoacoustics/audio-analysis
                Carlos Abrahams:
https://zenodo.org/record/1188744#.X5Hn5JNKh25
02:01:03
                Anne Clark:
                                @jernej Planjnar Completely agree. Trying to
indicate that with term "sensory"! As a term, it fits well with the "scape" notion.
                                        put the sound up guys !
02:09:59
                Dr. Amandine Gasc :
                Kelly Kahukiwa: hahaha!!
02:10:03
02:12:02
                Richard Stein: we are awake
02:12:05
                Jana Vokurkova: :)
                                YES INDEED!!
                joni palmer:
02:12:14
                Kelly Kahukiwa: he blew his speaker up
02:12:22
02:14:47
                                Thank you so much, i have to go but this has been
                Sue Morgan:
amazing!
                Renata Sousa-Lima:
                                          we have done some validation on indices
02:15:22
applued to tropical ecosystems
```

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02:15:56
                Helen Whitehead:
                                        I always inspect files to see what values I
get for example if I am looking for birds then I don't want files with high levels
of wind/rain so I remove them from the study. ACI is sensitive to geophonic noise
                                        I agree. Ecologists need to understand the
02:16:01
                Elizabeth Znidersic:
environment they are monitoring from experience in the field. Then, their knowledge
can fully interpret the acoustic recordings
02:16:17
                Neysa Frechette:
                                        Least bittern paper mentioned earlier:
https://www.sciencedirect.com/science/article/pii/S1574954119303255
02:16:47
                Renata Sousa-Lima:
                                        eg: Peer-ReviewedOpen AccessJEA 2018, 2(1),
2; doi: 10.22261/jea.pvh6yz
02:17:50
                Robert Manzano: As I undertand different taxa (birds, frogs,
insects,...) are identified just by frequency bands? saying insects will be
everything between e.g. 8 and 20kHz, birds will be everything between 1 and 8kHz and
02:19:18
                Renata Sousa-Lima:
                                        @Robert Manzano I wish it was that simple,
but it is not.
02:19:21
                Laura S:
                                Suggestions for bat measurements? How to measure in
relation to other audio and biodiversity.
02:19:49
                Sunil Kumar:
                                @Robert Manzano Some katydids may reach 150kHz... so
it gets much more complex than that
02:19:51
                Brian Hendrix: A lot of bird sounds and insect sounds occupy the
same frequency space.
                Helen Whitehead:
02:20:09
                                        I have always found that using filters on
acoustic recordings will always result in loss of taxa vocalisations for example the
Nightjar vocalises in very low frequencies so if you only look between 1 and 8kHz
you may miss species
                                        if we jhave big dat using the current
02:20:14
                Renata Sousa-Lima:
sampling frequ imagine going up to ultrasounds!
                Robert Manzano: that is why I was asking as many insects overlap
with birds, mammals and bats. I understand then classifiers are run first before
getting into ACI and more
                Orlando Acevedo-Charry: Agree @Helen Whitehead. Other examples from
02:21:07
the Neotropics include tinamous, curassows and some fruit crows or big cotingas
02:21:12
                Anthony Aboumrad:
                                        This is an open-source project tailored to
the analysis of rat vocalizations, including ultrasonic:
https://github.com/DrCoffey/DeepSqueak
                Helen Whitehead:
                                        i don't run classifiers first before running
02:21:13
indices
02:21:16
                Renata Sousa-Lima:
                                        I think that calls to another way to
classify organisms within soundscapes
02:21:36
                Renata Sousa-Lima:
                                        Christopher Clark at Cornell University has
some very good ideas about that
02:22:20
                Sunil Kumar:
                                There are overlapping in frequencies, intensity
measurements are dependent on distance from the microphones, acoustic mimicry in
some animals all make the situation more difficult
02:22:33
                Renata Sousa-Lima:
                                        yes, indeed
                                        yes we have a lot of mimicry but i find with
                Helen Whitehead:
02:23:58
any of these methods they come with limitations, I try to work with the best
possible solution and explain limitatins in my work
02:24:06
                Robert Manzano: @Helen Whitehead but in order to get to some indexes
```

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(e.g. richness) you first need to know what taxa is present, right?
                                        some taxa do not follow the rationale built
02:24:37
                Renata Sousa-Lima:
into the indices
                Orlando Acevedo-Charry: Agree @Renata Sousa
02:25:34
                                        so many snatural solutions to animal
02:25:50
                Renata Sousa-Lima:
communication that have evolved, that is why validation is important. I think the
indices are very useful to call our attention to patterns and dynamics
02:26:05
                Renata Sousa-Lima:
                                        general patterns
02:26:51
                Orlando Acevedo-Charry: but a post validation of the sound source is
always a great way to try to get the mechanism behind the pattern ;)
                Renata Sousa-Lima:
02:27:00
                                        true
02:27:07
                Abram Fleishman:
                                        Abram Fleishman (You) 12:06 PM
I know that `Kaleidoscope` now computes soundscape indices. And I have used
`seewave` and `soundecology` R packages, and QUT (Towsey) `AnalysisPrograms.exe` to
calculate indices. What other software/packages are out there?
02:27:08
                Renata Sousa-Lima:
                                        see our paper! ;)
02:27:09
                Helen Whitehead:
                                        @robert manzano I look at the soundscape as
a whole reather that specifics so I remove files environmental noise and files with
extreme insect values (ACI and BIO give a good indication of these extreme values).
As I focus on only birds I am then left with files with just birds and other noise.
I then look at the ACI, BIO, ADI, AEI indexes to see which sites have more bird
presence from the indices as I know I have removed the files that would bias the
index
                William Carvalho:
02:27:14
                                        @Renata Souza-Lima, I'm looking for a
doctoral candidate to work with sondscape ecology in state of Amapá. I have data for
land use change (Amazonian savannas change in soybean and eucalyptus plantations).
Do you know any potential candidates? :)
02:28:03
                Renata Sousa-Lima:
                                        send me the call by email xxxxxxxxxxxxx and
I will post among my students
                Yvette Abril Del AngelFlores:
                                                Someone involved in sustainability
02:28:33
science and ecoacoustics?
                Jana Vokurkova: Someone involved in sustainability science and
02:29:01
ecoacoustics? - not yet but very interested
02:29:16
                William Carvalho:
                                        Thank you, Renata:)
                Alison Styring: someone could use a multivariate approach to assign
02:29:25
meaningful bands to their system. take a sample of sound, identify the different
taxa, then use PCA or another ordination method to plot the taxa and correlate with
frequencies. you could then use that information to assign bands that encompass the
types of organisms you want to be reflected in an index. just a thought.
                                We are in a way (sustainability science and
02:29:39
                Laura S:
ecoacoustics)
                Renata Sousa-Lima:
                                        sustainability science and ecoacoustics -
02:30:13
will get to that eventually
                Jana Vokurkova: We are in a way (sustainability science and
02:30:42
ecoacoustics) - please could you share some link, cannot see the full name here in
chat, thanks
```

02:30:49

Ivan Campos:

We have used acoustic indices to detect the main

differences between soundscapes from a National Park and the surroundings in Brazil. Indices measurements were split into "acoustic regions" to facilitate analysis and ecological interpretation of results. Dr. Towsey is one of the authors. In case you wanna take a look at:

https://authors.elsevier.com/a/1bqpE_,3Lxxn4Ki

```
Carlos Araújo: Amazing talk, thanks!
02:30:53
02:30:56
                Samantha Ordóñez Flores:
                                                @William Carvalho, @Renata
Souza-Lima hi! I am a Masters students looking for the possibility of an internship
in bioacoustics! Do you know of any? I really appreciate It
02:31:08
                Orlando Acevedo-Charry: @Alison Styring it reminds me the Furumo &
Aide paper in Landscape Ecology
https://www.researchgate.net/publication/332256084_Using_soundscapes_to_assess_biodi
versity in Neotropical oil palm landscapes
02:31:09
                Laura S:
                                Jana if you send an email can contact you
                Penelope Fialas:
02:31:12
                                        Thank you so much!
02:31:24
                Ludmilla Aguiar:
                                        Thanks! Great talking.
02:31:29
                Robert Manzano: @Helena Whitehead How do you discern between birds
and insects? I've come across many recordings (in the nocmig topic) with lots of
ortoptera insects constantly singing within the same frequency band as birds. If I
look a the soundscape as a whole I would have unreal results about the bird
community
02:31:34
                Matthew Casali: Thank you!
                William Carvalho:
                                        Thank you, Bryan! Great!
02:32:01
                Matheus Mancini:
                                        Thank you very much Dr. Pijanowski!
02:32:13
02:32:22
                Alison Styring: @Orlando, Thank you!
02:32:41
                Jana Vokurkova: Laura, I can see just Laura S here in chat ... no more
info... please could you share link to the lab or so? thanks
                Laura S:
02:32:51
                                if you send email can contact
02:33:10
                Helen Whitehead:
                                        @Roberto Manzano I find it easy to discern
between the two, I have never ran into any problems, i mostly have cicada and
ortoptera . I remove the unwanted sounds to not create unreal results about the bird
community
02:33:28
                Robert Manzano: I know there are many packages and software for
classifiers as well as research groups currently working on this, but I raised the
question in case there is a different approach to the issue from the soundscape
ecology perspective :)
02:33:58
                Helen Whitehead:
                                        FOr example I had a high value for ACI and
when I looked it was insects occupying one frequency band, if i was to include this
in my study it is not a true represenatin
02:34:46
                Helen Whitehead:
                                        of the bird community in the soundscape
                Robert Manzano: ok so you check visually on the spectrogram after
02:35:37
running the ACI to make sure the index is reflecting true bird data and not unwanted
(insects) data
                                        I found I had a lot of outliers and the
02:37:03
                Helen Whitehead:
outliers were mainly insects
                                        @Dr Michael Towsey I don't think I have come
02:37:57
                Helen Whitehead:
across the spectral version, is this the ACI that is calculated in Kaleidescope?
                Ellen Murphy: Thank you! gotta to go to class
02:38:30
02:38:46
                Ian Agranat:
                                ACI in Kaleidoscope is near identical to the Seawave
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R implementation by Jerome Sueur - slightly different but scalable to Towsey
                David Hill:
02:39:01
                                Links to sound libraries?
02:39:15
                Francisco Rivas:
                                        xenp-canto.org
02:39:18
                Sunil Kumar:
                                can we calculate ACI for ultrasonic organisms in
Kaleidoscope?
02:39:24
                Francisco Rivas:
                                        xeno-canto.org
                Francisco Rivas:
02:39:35
                                        macaulaylibrary.org
                David Hill:
                                @Francisco Rivas Thank you!
02:40:25
                                I need to leave. Thanks for the interesting talks!
02:40:41
                Ivan Campos:
                                Anyone working with substrate-borne vibrations?
02:40:47
                Juan López:
Biotremology?
02:41:12
                Sunil Kumar:
                                @David Hill orthoptera.speciesfile.org
02:41:31
                Renata Sousa-Lima:
                                        yes, I work with folks from seismology using
sensors that detect large whales
                                        @Dr Michael Towsey ok, so is it an issue to
02:41:38
                Helen Whitehead:
filter out files with unwanted sound and then run the ACI?
                                        offshore
02:41:40
                Renata Sousa-Lima:
02:44:13
                Renata Sousa-Lima:
                                        some ants produce sound, just very low
intensity, probably not detected using SM
                Jana Vokurkova: Related to Amandine's note earlier, I would like to
continue in this using acoustic indices as I have a lot of recordings from Mt.
Cameroon
https://www.cambridge.org/core/journals/journal-of-tropical-ecology/article/seasonal
ity-of-vocal-activity-of-a-bird-community-in-an-afrotropical-lowland-rain-forest/B9B
D421FF2B86A543EA1470CA4FF82B2
02:45:49
                William Carvalho:
                                        @Samanta Ordóñez, I'm starting in this area
... I think Renata would have more experience to say something.
02:45:50
                Renata Sousa-Lima:
                                        impressive results
                                        @Samanta the field is growing all over South
02:47:19
                Renata Sousa-Lima:
America
02:47:23
                Helen Whitehead:
                                        Unfortunately I have a lot of files with
environmental noise, very frustrating. Sorry for all the questions, I am an
ecologist researcher who has started using acoustic indices and there is a lot to
learn. To avoid the frequency bands that contain unwanted noise would I set a filter
to focus only on frequency bands associated with birds (similar to the BIO which
focuses between 2 - 8 kHz)
                Renata Sousa-Lima:
02:49:22
                                        @Helen, I dont know what your interests are
but if focused on specific taxa you should look into detectors
02:50:45
                Jana Vokurkova: :)
02:50:46
                Helen Whitehead:
                                        @Renata I am going to be starting to work
with classifiers through Kaleidoscope to focus on specific species
                                A tutorial on how to deal with getting the "signal"
02:50:52
                Laura S:
from the "noise" pun intended would be super.
                Karina Townsend:
                                        This is really great - to hear Amandine talk
02:51:06
about the project I actively contributed to. I had just bought an Audiomoth and it
was delivered just as lockdown happened. It was a beautiful citizen science project
to be involved in.
02:51:12
                Manon Tyssandier:
                                        Thank you so much Dr Gasc it was really
interesting!
02:51:14
                Orlando Acevedo-Charry: Excellent talk Amandine!
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02:51:22
                Sarah Obaid:
                                Thank you Dr. Gasc
                Renata Sousa-Lima:
                                        Loved your talk Dr Gasc!
02:51:23
02:51:29
                                Great to hear un update on Silent Cities!
                John Ouinn:
02:51:29
                Matthew Casali: Thank you Dr. Gasc!
                Penelope Fialas:
                                         I had seagulls attacking my audiomoth
02:51:30
during the Silent Cities Project :)
                                Thanks Amandine - great to see use framed around
02:51:44
                Simon Butler:
scientific questions
                Hairul Masrini Muhamad: love the talk Dr Gasc!
02:51:55
                Karina Townsend:
                                        My audio moth documented the moving in and
02:51:58
out of neighbours and their cultures!
02:52:00
                Alexander MacPhail:
                                        You could try www.wildtrax.ca
                                Awesome, Amandine!! Super fan
02:52:04
                Diego Llusia:
                Carlos Araújo: Thanks a lot! Really enlightening!
02:52:12
                Alison Styring: great question
02:52:14
                Jana Vokurkova: Exciting talk, thank you very much!
02:52:33
                                Change science culture!
02:52:42
                Laura S:
02:54:19
                Renata Sousa-Lima:
                                        Unfortunately it is not about science...
02:54:28
                Laura S:
                                It is in some ways
02:54:33
                Sunil Kumar:
                                Great talk Dr. Gasc
02:54:51
                Laura S:
                                funding, etc. require competition, but collaboration
is needed for fully open science, etc.
                                        I am all for free science made for and to
02:54:55
                Renata Sousa-Lima:
all, dont get me wrong
                                        it is frustrating though, I was one of the
02:55:15
                Renata Sousa-Lima:
people asking these questions
02:55:49
                Alison Styring: and when you work away from your home base, there
are issues regarding who has the right to share the sounds and to have access
                Alison Styring: it can be very sensitive. it seems best to share as
much as possible, but I never want to impinge on my collaborators especially if it's
international work.
                Hairul Masrini Muhamad: agree with Alison
02:56:52
02:57:57
                Brian Huggett:
                                data is different than innovation
02:58:18
                anne arriens:
                                Merci a vous
                Laura S:
                                Thank you so much! Amazing!
02:58:22
02:58:38
                John Quinn:
                                Thank you everyone!
                                        awesome presentations, thank you so much!
02:59:03
                Anthony Aboumrad:
                Penelope Fialas:
                                        Thank you the panellists and wildlife
02:59:06
acoustics for organising this! It was great
                Mona Doss-Spencer (Wildlife Acoustics):
02:59:07
http://bit.ly/WildlifeMailingList
                Supun Galappaththi:
                                        Awesome talk, thank you very much!
02:59:08
02:59:10
                Neansaí O'Donovan:
                                        Many thanks to everyone, that was so
informative. Hats off to everyone for their contribution.
                Andrew Fairbairn:
                                        Great presentations, thank you!
02:59:14
                Renata Sousa-Lima:
                                        It has been great! Thank you all!
02:59:20
02:59:30
                Roberto Vargas Masís:
                                        Awesome presentations! Thank you so much!
                                        This has been fantastic. Thank you so much.
02:59:42
                Karina Townsend:
                Liliana Ferreira:
                                        Thank you so much everyone for sharing all
02:59:42
this wonderful information with us and for your time c:
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02:59:51
                CINDY STAICER: Fantastic session, thanks so much!
                Mona Doss-Spencer (Wildlife Acoustics): for survey and raffle
02:59:53
https://bit.ly/WAWebinarSurvey
02:59:54
                Neysa Frechette:
                                        Thank you!
                                        If anybody have interest on soundscape data
02:59:57
                milton cezar ribeiro:
within Atlantic Forest Biodivesity Hotspot, we have about 40TB of fresh data to play
with :-)
                Roberto Vargas Masís:
                                        I share again this for all participante that
03:00:06
want to colaborase with us. Currently I'm using acoustic indexes to characterize of
soundscape associated to the bird community as a proposal for the establishment of
an Interurban Biological Corridor in Costa Rica. If some of you can collaborate with
this form will be very useful for us to take in count your experience and opinion
https://bit.ly/acousticindexes cbi english
Thanks!
03:00:07
                Jessica Chen:
                                Thank you all! This has been very informative!
                Christine Gabriele:
                                        Thanks!
03:00:14
03:00:18
                Yoba Alenga:
                                Thanks for the talk. It was really amazing
                Jessica McCordic:
                                        Thanks so much to all the speakers--this was
03:00:25
a great webinar!
                Mona Doss-Spencer (Wildlife Acoustics): link to survey
03:00:40
https://bit.ly/WAWebinarSurvey
                Mona Doss-Spencer (Wildlife Acoustics): link to newsletter sign up
http://bit.ly/WildlifeMailingList
03:00:54
                Andrew Fairbairn:
                                        Exciting
                Ines Moran:
                                Cool!
03:01:21
                Brian Hendrix: It's about time! :)
03:01:31
03:01:31
                Mona Doss-Spencer (Wildlife Acoustics): link to survey
https://bit.ly/WAWebinarSurvey
link to newsletter sign up http://bit.ly/WildlifeMailingList
03:01:47
                A. Gasco:
                                thank you
                                        Thank you all, this was excellent!
03:01:47
                Matthew Penella:
                Yvette Abril Del AngelFlores:
                                                @Milton Cezar Ribeiro I'm interested
03:01:53
XXXXXXXXXX
                Cristian Pérez-Granados:
                                                Thanks to all!
03:01:54
03:01:56
                Hanika Cook:
                                Thank you!
03:01:56
                Enis Berk Coban:
                                        Thank you, it was great
                                Thank you all!!!
03:01:58
                Rada Petric:
                Luane Ferreira: Thank you all
03:01:58
03:01:58
                Renata Platenberg:
                                        thank you!
                                        Thank you everyone!
03:01:58
                Manon Tyssandier:
                Ines Moran:
                                Thank you all!
03:02:00
03:02:00
                Victor Matasov: Great! Thanks a lot to everyone!
03:02:09
                Sarah Obaid:
                                Thanks everybody
                Alison Styring: Thank you!
03:02:09
                Claudius Kerth: Thanks to all presenters! Very interesting talks!
03:02:16
                                        Thanks everyone. A great session and loved
03:02:17
                Dr. Bryan Pijanowski:
all of the wonderful comments from everyone! WoW Listen well!
                                Great stuff. Thanks everyone
03:02:18
                Mark Carter:
03:02:18
                Allison Kupar: Thank you! Great information.
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03:02:25 03:02:25 03:02:28	Luke Strugnell: thanks that was great. Jeff Matheson: Thank you! Very interesting. Keith Lyons: Gracias
03:02:35 03:02:37 03:02:41	Carlos Iglesias-Merchan: thank you. hugs! Monica Retamosa: Thanks! Harold Mills: Thanks, everybody!
03:02:44 03:02:44 03:02:57	Michael Lynch: Thanks! Karina Townsend: So timely Juan López: Thank you very much!