

Dr. Lydie Dussol

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Archaeologist, Anthracologist

University Côte d'Azur, CEPAM

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Current position

Associate professor in Archaeology at Université Côte d'Azur (Nice, France) since 2021.

Member of the CEPAM laboratory "Culture, Environment, Prehistory, Antiquity, Middle Age", UMR 7264 of the CNRS, team "Management of natural resources, Environment and Societies" (GRENES).

Research area

Field of research: Mesoamerican Archaeology, Maya Civilization, Caribbean Archaeology, Environmental Archaeology

Specialization: Anthracology (Charcoal analysis), Paleofire study, Paleoecology

Study period: Holocene / Paleoindian, Archaic, Formative, Classic, Early Ceramic

Study area: Mexico, Central America (Guatemala, Honduras), Lesser Antilles (Martinique)

Research topics

- Paleobiodiversity and evolution of neotropical forests during the Holocene under natural (climate, volcanism) and anthropogenic forcing.
- Pre-Columbian forest economies (management of wood resources, firewood economy, slash-and-burn agriculture, arboriculture, agroforestry) and adaptation to forest loss.
- Anthropization processes in neotropical environments.
- Role of climate change and deforestation in the collapse of Lowland Maya societies.
- Ritual fires and uses of ashes in Maya funerary practices and ritual abandonment.
- Relationships of the ancient Mayas to the forests.

Professional experience

- 2021-** **Associate professor in Archaeology** at Université Côte d'Azur (Nice, France), Department of History, CEPAM Laboratory. Tenured position.
- 2020-2021** **Full-time Lecturer in Archaeology (12-month)** at Université Côte d'Azur (Nice, France), Department of History, CEPAM Laboratory.
- 2019-2020** **Post-doctoral Fellow (12-month)**, Initiative of Excellence IDEX UCA^{JEDI}, Université Côte d'Azur (Nice, France), CEPAM Laboratory.
- 2012-2015** **Doctoral contract (3-year)**, University Paris I Panthéon-Sorbonne (Paris, France), Doctoral School of Archaeology, "Archaeology of the Americas" Laboratory.

Awards

- 2015** **Doctoral fellowship** of the L'Oréal-UNESCO Foundation, For women in science programme France (15,000€).

Education

- 2012-2017** **PhD in Archaeology** at the University Paris 1 Panthéon-Sorbonne (Paris, France), Laboratory "Archaeology of the Americas" (ArchAm, UMR 8096 of the CNRS), defended in Paris on December 5, 2017.

Dissertation: "*Maya fires and forests, uses of firewood in the Central Maya Lowlands during the Classic period: the case of Naachtun, Petén, Guatemala, Anthracological approach*"

Advisors: Dominique Michelet (CNRS, UMR 8096 ArchAm) and Michelle Elliott (University Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn).

Jury composition: Isabelle Théry-Parisot (CNRS, UMR 7264 CEPAM), Margareta Tengberg (MNHN UMR 7209), Gerald Islebe (ECOSUR Campeche, Mexico), Christopher Morehart (Arizona State University), Philippe Nondédéo (CNRS, UMR 8096 ArchAm);

- 2010-2012** **M.A. in Archaeology**, Archaeology and Environment programme, major in Archaeobotany, University Paris 1 Panthéon-Sorbonne (Paris, France).

Dissertation: "*The use of firewood in funerary practices at Río Bec (Campeche, Mexico) during the Terminal Classic (AD 850-950): anthracological analysis of burials and domestic hearths*"

Advisors: Christophe Petit and Michelle Elliott (University Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn).

- 2007-2010** **B.A. in History of Art and Archaeology**, University Paris 1 Panthéon-Sorbonne (Paris, France).

- 2006** **High School Diploma in Science**, major in mathematics (Saint-Pierre, Reunion Island, France).

Research activities

Principal investigator

- 2022** **REBIRTH "Ecological resilience and biodiversity of tropical forests after the end of human activities"**, *Exploratory project, first support* (PEPS) INEE 2022. In collaboration with Chloé Andrieu (CNRS, UMR 8096 ArchAm) and Boris Vannière (CNRS, UMR 6249 Chrono-Environnement).

- 2019-2020** **"Ethnoecology, adaptation and resilience: fire uses and agroforestry in tropical environments, Guatemala"**, Postdoctoral project IDEX UCA^{JEDI}, supervised by Isabelle Théry-Parisot (CNRS, UMR 7264 CEPAM), in collaboration with Boris Vannière (CNRS, UMR 6249 Chrono-Environnement).

- 2012-** **Anthracological collection of modern woods from Central America and Lesser Antilles**. Curated at CEPAM Laboratory (Nice, France). In collaboration with the

Univeristy Paris 1 Panthéon-Sorbonne, the University San Carlos of Guatemala, the National Autonomous University of Mexico (UNAM), the National Museum of Natural History of Paris (MNHN), the Royal Museum of Central Africa in Tervuren.

Member of archaeology research programmes

- 2021-** **Cancuén-Raxruha Regional Project** (Alta Verapaz, Guatemala), 2016-2023. Dir. Chloé Andrieu and Paula Torres, CNRS, UMR 8096 ArchAm, Vanderbilt University, University San Carlos of Guatemala. French Ministry for Europe and Foreign Affairs.
- 2021-2023** **Collective Research Project (PCR) “The Early Ceramic in Martinique”** (Martinique, France). Dir. Benoit Bérard, University of the French Antilles, UMR 8096 ArchAm.
- 2018-** **Yojoa-Los Naranjos Regional Project (PARYNA)** (Cortés, Honduras), 2018-2025. Dir. Julien Sion, Center for Mexican and Central-American Studies, UMR 8096 ArchAm. French Ministry for Europe and Foreign Affairs.
- 2012-** **Petén-Norte Naachtun Project** (Petén, Guatemala), 2012-2022. Dir. Philippe Nondédéo, and Lilian Garrido, CNRS, UMR 8096 ArchAm, University San Carlos de Guatemala. French Ministry for Europe and Foreign Affairs.

Anthracological studies

- 2022-** **Gradis** (Martinique, France), Early Ceramic period. As part of the Collective Research Project (PCR) “The Early Ceramic in Martinique” (2021-2023). Dir. Benoit Bérard, University of the French Antilles, UMR 8096 ArchAm.
- 2021-** **Raxruha and satellites sites** (Alta Verapaz, Guatemala), Classic period. As part of the Cancuén-Raxruha Regional Project. Dir. Chloé Andrieu and Paula Torres, CNRS, UMR 8096 ArchAm, Vanderbilt University, University San Carlos de Guatemala. French Ministry for Europe and Foreign Affairs.
- 2021-** **El Palmar** (Campeche, Mexico), Classic period. As part of the El Palmar Archaeological Project. Dir. Kenichiro Tsukamoto, University of California, Riverside.
- 2020-** **El Gigante Rockshelter** (La Paz, Honduras), Paleoindian to Classic period. Dir. Kenneth Hirth, PennState University.
- 2020-2021** **Piedras Negras** (Petén, Guatemala), Classic period. As part of the Busiljá-Chocoljá Archaeological Project. Dir. Charles Golden, Andrew Scherer and Shanti Morell-Hart, Brandeis University, Brown University, University of McMaster.
- 2019** **Uaxactún** (Petén, Guatemala), modern/ethnographic samples. As part of the PAYAMA project “Past and present agrarian landscapes in the Maya area”. Dir. Aline Garnier and Eva Lemonnier, University Paris-Est Créteil, University Paris 1 Panthéon-Sorbonne. Laboratory of Excellence (LabEx) DynamiTe.
- 2018-** **Los Naranjos** (Cortés, Honduras), Terminal Classic – Postclassic transition. As part of the Yojoa-Los Naranjos Regional Project. Dir. Julien Sion, Center for Mexican and Central-American Studies, UMR 8096 ArchAm. French Ministry for Europe and Foreign Affairs.
- 2013-2014** **Orival « Le Grésil »** (Normandy, France), Gallo-Roman period. Dir. Jérôme Spiesser, University Paris 1 Panthéon-Sorbonne, UMR 7041 ArScAn. Regional Archaeology Service (SRA) of Normandy.

- 2012-2018 Naachtun** (Petén, Guatemala), Classic period. As part of the Petén-Norte Naachtun Archaeological Project. Dir. Philippe Nondédéo and Lilian Garrido, CNRS, UMR 8096 ArchAm, University San Carlos de Guatemala. French Ministry for Europe and Foreign Affairs.
- 2010-2012 Río Bec** (Campeche, Mexico), Classic period. As part of the Río Bec Archaeological Project (2002-2009). Dir. Dominique Michelet and Marie-Charlotte Arnould, CNRS UMR 8096 ArchAm. French Ministry for Europe and Foreign Affairs.

Teaching activities

Courses taught

Master's degree: Prehistory, Paleoenvironments and Archaeosciences programme

- 2022-** **SMUTP305 Advanced courses:** "Experimental archaeology." Tutorial classes.
- 2022-** **SMUTP304 Advanced courses:** "Scientific communication." Tutorial classes.
- 2020-** **SMUTP301 Interdisciplinary research seminars:** series of conferences organized annually at CEPAM Laboratory with the participation of invited researchers.
- 2020-** **SMUTP102 Archaeobotany and Paleoenvironments.** Lecture and tutorial classes.
- 2020-** **SMUTP201 Methodology – Introduction to professional development:** "Research ethics and good laboratory practices", "Bibliography", "Dissertation writing." Lecture and tutorial classes.
- 2020-2021** **SMUTP305 Advanced courses:** "Pre-Columbian archaeology." Tutorial classes.
- 2020** **SMUTP304 Advanced courses:** "Proxies in paleoclimatology." Tutorial classes.

Bachelor's degree in History

- 2022-** **HLEHPR6 Prehistory and protohistory:** "The demise of the Maya as disruption of the environment-society balance, introduction to environmental archaeology." 3rd year lecture course.
- 2020-** **HPEHAP4 Methodology and archaeology of Prehistory:** "Neolithization in the world." 2nd year lecture course taught with Sandrine Bonnardin.
- 2020** **HLEHAQ5 Analysis in ancient archaeology:** "Environmental archaeology." 3rd year tutorial classes.

Bachelor's degree in Life Science

- 2022-** **"Plant domestication and societies: archaeobotanical approach."** Lecture in the 3rd year course SLEVM608 Evolutionary history of the angiosperms (coord. Anne-Violette Lavoit).
- 2020-** **"Anthropization and paleoenvironments."** Lecture and tutorial class in the 3rd year course SLEVO501 Applied Ecology (coord. Luisa Passeron).
- 2020-** **"Paleobiodiversity: past extinctions."** Lecture in the 3rd year course SLEVO601 Biodiversity (coord. Virginie Raybaud).

Other lectures

- 2018** “**Fire, forests and ecology at Naachtun.**” Lecture in the seminar “Naachtun: anatomy of a Maya regional capital”, coord. Philippe Nondédéo. National Institute of Oriental Languages (INALCO) (Paris, France). Bachelor’s degree.
- 2018** “**Introduction to Archaeobotany.**” Lecture in the course “Archaeobotany: theory and practice” (coord. Michelle Elliott). University Paris 1 Panthéon-Sorbonne (Paris, France), Archaeology and Environment programme. Master’s degree.
- 2018** “**Forest economies of the ancient Mayas.**” Lecture class in the seminar “Maya archaeology and art” (coord. Eva Lemonnier). University Paris 1 Panthéon-Sorbonne (Paris, France), Prehistory and Protohistory programme. Master’s degree.
- 2014** “**Laboratory methods in Archaeobotany.**” Tutorial classes in the course “Method and Theory in Archaeobotany” (coord. Michelle Elliott). University Paris 1 Panthéon-Sorbonne (Paris, France), Archaeology and Environment programme. Master’s Degree.

Student mentoring

Supervision of graduate students’ dissertations

- 2022-2023** **Jérémy Höhne**, 1st year of Master’s degree, Prehistory, Paleoenvironments and Archaeosciences programme, University Côte d’Azur (Nice, France).
Dissertation: “Paleoenvironment and introduction to Anthracology in the Cancuén region (Central America) for the end of the Maya Classic period”. Principal advisor.
- 2021-2022** **César Laplanche**, 1st year of Master’s degree, Prehistory, Paleoenvironments and Archaeosciences programme, University Côte d’Azur (Nice, France).
Dissertation: “Maya arboriculture in the city of Naachtun (Petén, Guatemala), carpological approach.” Principal advisor.
- 2021-2022** **Chloé Trabon**, 2nd year of Master’s degree, Archaeology and Environment programme, University Paris 1 Panthéon-Sorbonne (Paris, France).
Dissertation: “Firewood use by the agro-ceramists of the site of Terre Patate (Macouba, Martinique), early ceramic period (300 BC – AD 400), anthracological study of Test pit 8.” Co-advisor with Michelle Elliott and Benoît Bérard.
- 2020-2021** **Chloé Trabon**, 1st year of Master’s degree, Archaeology and Environment programme, University Paris 1 Panthéon-Sorbonne (Paris, France).
Dissertation: “Firewood use by the agro-ceramists of the site of Terre Patate (Macouba, Martinique), early ceramic period (300 BC – AD 400), preliminary study to the anthracological analysis of Test pit 8.” Co-advisor with Michelle Elliott and Benoît Bérard.
- 2020-2021** **Lucie Jacob**, 2nd year of Master’s degree, Prehistory, Paleoenvironments and Archaeosciences programme, University Côte d’Azur (Nice, France).
Dissertation: “The use of soils by the Mayas of Naachtun at the Classic period: pedogenesis of the black earths”. Co-advisor with Louise Purdue.
- 2019-2020** **Lucie Jacob**, 1st year of Master’s degree, Prehistory, Paleoenvironments and Archaeosciences programme, University Côte d’Azur (Nice, France).

Dissertation: *“Preliminary study to the analysis of the black earths identified in Naachtun (Guatemala).”* Co-advisor with Louise Purdue.

2015-2016 **Nicolas Bermeo**, 2nd year of Master’s degree, Archaeology and Environment programme, University Paris 1 Panthéon-Sorbonne (Paris, France).

Dissertation: *“The management of wood resources in the Sechura Desert on the north coast of Peru (AD 5th-8th c.), anthracological study of the site of Bayovar-01.”* Co-advisor with Michelle Elliott and Nicolas Goepfert.

Supervision of undergraduate students’ research work

2020-2021 **Doriane Vincent**, Bachelor’s degree in History, University Côte d’Azur (Nice, France).

Dissertation: *“Archaeological discoveries in ichthyology and malacology in the French-Italian region during the Paleolithic.”* Co-advisor with Tatiana Theodoropoulou.

Supervision of students’ internship

2021 **Lily Canepari**, Bachelor’s degree in Life Science, University Côte d’Azur (Nice, France). Four-week internship at CEPAM Laboratory.

Topic: Preliminary carpological study of the site of Los Naranjos, Honduras.

2021 **Eugénie Dautriche**, Bachelor’s degree in Life Science, University Côte d’Azur (Nice, France). Four-week internship at CEPAM Laboratory.

Topic: Study of the fire signal in pre-Columbian soils at the site of Naachtun (Guatemala).

2018 **Ariane Lambert**, Master’s degree, Archaeology and Environment programme, University Paris 1 Panthéon-Sorbonne (Paris, France). One week internship at the Archaeobotany facility of ArScAn laboratory

Topic: Management of an anthracological reference collection and initiation to taxonomic identification of wood charcoal based on material from *la Villa du Grésil*, Normandy.

Member of PhD thesis monitoring committees

2021-2024 **Fanny Lachery**, Doctoral School of Archaeology, University Paris 1 Panthéon-Sorbonne (Paris, France). Advisors: Christophe Petit and Jonhattan Vidal.

Dissertation project: *“Anthropization of the environment during the Anthropocene in Reunion Island (Indian ocean), contribution of botanical analyses to archaeological research.”*

2020-2023 **Aurélié Liard**, Doctoral School of Societies, Humanities, Arts and Letters (ED SHAL), University Côte d’Azur (Nice, France). Advisors: Isabelle Théry-Parisot and Auréade Henry.

Dissertation project: *“Evolution of paleoenvironments and prehistoric pyrotechnologies in the Bonneville Basin (Nevada, USA) at the Pleistocene-Holocene transition.”*

Organisation of scientific events

Organizer

- 2022 International study day** “Anthracology worldwide: Diversity of contexts and environments: applications, limits and advances”, Nice, France, December 16, 2022.
Organizers: Elysandre Puech, Lydie Dussol and Auréade Henry. University Côte d’Azur, CEPAM Laboratory.
- 2022 Research seminar** “The ancient Mayas: recent archaeological and paleoecological research”, Nice, France, December 5, 2022.
Organizers: Naya Cadalen and Lydie Dussol. University Côte d’Azur, CEPAM Laboratory.
- 2021 Research seminar** “Human and animal health in the past: archaeological and historical approaches”, Nice, France, December 9, 2021.
Organizers: Lydie Dussol, Aurélie Liard, Thomas Camagny and Anne-Marie Gomez. University Côte d’Azur, CEPAM Laboratory.
- 2019 International conference** “Millennial Tropical Agricultures, cross-cutting approaches to global challenges” (MilAgro), Nice, France, October 1-3, 2019.
Organizers: Lydie Dussol and Stéphen Rostain. University Côte d’Azur, CEPAM Laboratory, University Paris 1 Panthéon-Sorbonne, ArchAm Laboratory.
- 2017 Symposium** “The use of plants in ancient rituals: new perspectives from paleoethnobotany”, Vancouver, March 31, 2017. Annual meeting of the Society for American Archaeology.
Organizers: Lydie Dussol and Michelle Elliott. University Paris 1 Panthéon-Sorbonne.
- 2016 Symposium** “Reconstructing resources availability, management and use at Naachtun, Guatemala, a regional Maya center of the Classic period”, Orlando, April 7, 2016. Annual meeting of the Society for American Archaeology.
Organizer: Lydie Dussol. University Paris 1 Panthéon-Sorbonne, Laboratory of Excellence (LabEx) Dynamite.

Member of scientific committees

- 2023 24th Congress of Archaeometry of the GMPCA** Nice, France, April 17-21, 2023. University Côte d’Azur, CEPAM Laboratory.

Member of organizing committees

- 2022 11th Annual meeting of the Research Group in Wood Sciences**, “From the forest to the wood, past, present and future: cultural and natural patrimonies”, Nice, France, November 16-18, 2022. University Côte d’Azur, CEPAM Laboratory.
- 2019 Thematic school** “Pluribois: Woods and their uses, pluridisciplinary approaches to the effects of temperature”, Fréjus, France, June 3-7, 2019. The Research Group in Wood Sciences, CEPAM Laboratory.

Community service

Editorial activities

2020-2022 **Guest Editor** of the special issue “*Tropical Agriculture: Past and Present*” in the *Journal of Ethnobiology*, peer-reviewed journal quarterly edited by the *Society of Ethnobiology*. Guest Editors: Lydie Dussol and Stéphen Rostain.

Peer-reviewing

2022 *Vegetation History and Archaeobotany*, Springer, 1 article reviewed.

2021-2022 *Journal of Ethnobiology*, Society of Ethnobiology, 4 articles reviewed.

2020 *Latin American Antiquity*, Cambridge University Press, 1 article reviewed.

2018 *Environmental Archaeology: The Journal of Human Palaeoecology*, Taylor & Francis Online, 1 article reviewed.

2017-2018 *Anales de Antropología*, Institute of Anthropology, National Autonomous University of Mexico, 2 articles reviewed.

2015-2020 *Quaternary International*, Elsevier, 2 articles reviewed.

Scientific production

Articles in referred peer-reviewed journals

2022 Fedick S., Morell-Hart S., **Dussol L.**, Lowland Maya agriculture (Part 2): Ancient landesque capital and long-term resource management strategies. *Journal of Archaeological Research*. In press.

2022 Morell-Hart S., **Dussol L.**, Fedick S., Lowland Maya agriculture (Part 1): Paleoethnobotanical residues and new perspectives on plant management. *Journal of Archaeological Research*. In press.

2022 **Dussol L.**, Rostain S., Tropical Agriculture, past and present: Cross-cutting approaches to global challenges. *Journal of Ethnobiology* 42: 105-109. <https://doi.org/10.2993/0278-0771-42.2.105>

2022 Castanet C., Purdue L., Testé M., Garnier A., Develle-Vincent A.-L., Mokadem F., Hatté C., Gauthier C., Lanos P., Dufresne P., Lemonnier E., **Dussol L.**, Hiquet J., Nondédéo P., Multi-millennial human impacts and climate change during the Maya early Anthropocene: implications on hydro-sedimentary dynamics and socio-environmental trajectories (Naachtun, Guatemala). *Quaternary Science Reviews* 283: 107458. <https://doi.org/10.1016/j.quascirev.2022.107458>

2022 Watson S., Schnell J., Morell-Hart S., Scherer A., **Dussol L.**, Health care in the marketplace: Exploring Maya medicinal plants and practices at Piedras Negras, Guatemala. *Ancient Mesoamerica* 1-24. <https://doi.org/10.1017/S0956536122000037>

2021 **Dussol L.**, Vannièrè B., Purdue L., Orange F., Testé M., Castanet C., Garnier A., Lemonnier E., Théry-Parisot I., How to highlight slash-and-burn agriculture in ancient soils? A modern baseline of agrarian fire imprint in the Guatemalan lowlands using charcoal particle analysis.

Journal of Archaeological Science: Reports 35: 102725.
<https://doi.org/10.1016/j.jasrep.2020.102725>

- 2021** Dussol L., Elliott M., Michelet D., Nondédéo P., Fuel economy, forest management and adaptation strategies in a Classic Maya city: applying anthracology to urban settings in high biodiversity tropical environments. *Vegetation History and Archaeobotany* 30: 175-192.
<https://doi.org/10.1007/s00334-020-00776-0>
- 2020** Testé M., Garnier A., Limondin-Lozouet N., Oxlaj E., Castanet C., Purdue L., Lemonnier E., Dussol L., Nondédéo P., The phytoliths of Naachtun (Petén, Guatemala): Development of a modern reference for the characterization of plant communities in the Maya Tropical Lowlands. *Review of Palaeobotany and Palynology* 272: 104130.
<https://doi.org/10.1016/j.revpalbo.2019.104130>
- 2019** Dussol L., Sion J., Nondédéo P., Late fire ceremonies and abandonment behaviors at the Classic Maya city of Naachtun, Guatemala. *Journal of Anthropological Archaeology* 56: 101099. <https://doi.org/10.1016/j.jaa.2019.101099>
- 2017** Dussol L., Elliott M., Théry-Parisot I., Experimental anthracology: Evaluating the role of combustion processes in the representivity of archaeological charcoal records in the Maya Lowlands. *Journal of Archaeological Science: Reports* 12: 480-490.
<https://doi.org/10.1016/j.jasrep.2017.02.020>
- 2017** Dussol L., Elliott M., Michelet D., Nondédéo P., Ancient Maya silviculture of breadnut (*Brosimum alicastrum* Sw.) and sapodilla (*Manilkara zapota* [L.] P. Royen) at Naachtun, Guatemala: a reconstruction based on charcoal analysis. *Quaternary International* 457: 29-42. <https://doi.org/10.1016/j.quaint.2016.10.014>
- 2016** Dussol L., Elliott M., Pereira G., Michelet D., The use of firewood in ancient Maya funerary rituals: a case study from Río Bec (Campeche, Mexico). *Latin American Antiquity* 27: 51-73.
<https://doi.org/10.7183/1045-6635.27.1.51>
- 2016** Dussol L., Économie des bois et gestion des forêts chez les anciens Mayas : approche anthracologique à Naachtun (Guatemala). *Les Nouvelles de l'Archéologie* 142: 38-43.
<https://doi.org/10.4000/nda.3276>

Edition of a special issue in a peer-reviewed journal

- 2022** Dussol L., Rostain S. (eds), Tropical Agriculture: Past and Present. Special issue. *Journal of Ethnobiology* 42: 105-260.

Chapters in peer-reviewed books

- 2022** Nondédéo P., Lemonnier E., Hiquet J., Purdue L., Castanet C., Dussol L., Testé M., Settlement pattern and land use dynamics at Naachtun: shaping an agrarian Maya town. In Marken D., Arnould C. (eds), *The flexible Maya city: attraction, contraction, and planning in lowland urban dynamics*. University Press of Colorado (In press).
- 2022** Hiquet J., Castanet C., Dussol L., Nondédéo P., Testé M., Purdue L., Tomadini N., Grouard S., Dorison A., After the Preclassic Collapse: a socio-environmental contextualization of the rise of Naachtun (Guatemala), In Brysbaert A., Vikatou I., Pakkenen J. (eds), *Shaping cultural landscapes: connecting agriculture, crafts, construction, transport, and resilience strategies*. Sidestone Press, Leiden, pp. 133–152.

Articles in peer-reviewed conference proceedings

- 2020** Dussol L., Tracing the hidden history of Maya forests through anthracological sequences. In Tsirtsoni Z., Kuzucuoğlu C., Nondédéo P., Weller O. (eds), *Different times? Archaeological and environmental data from intra-site and off-site sequences: Papers presented in a session organised in the 18th UISSP International Congress Paris, June 8*. Archaeopress, Oxford, pp. 111-121.
- 2020** Nondédéo P., Castanet C., Purdue L., Lemonnier E., Dussol L., Hiquet J., Garnier A., Testé M., Archaeological and paleo-environmental reconstructions in the tropical Maya area: the case of Naachtun (Guatemala). In Tsirtsoni Z., Kuzucuoğlu C., Nondédéo P., Weller O. (eds), *Different times? Archaeological and environmental data from intra-site and off-site sequences: Papers presented in a session organised in the 18th UISSP International Congress Paris, June 8*. Archaeopress, Oxford, pp. 94-110.

Articles in conference proceedings

- 2021** Castanet C., Nondédéo P., Dussol L., Testé M., Purdue L., Hiquet J., Lemonnier E., Garnier A., Dorison A., Tomadini N., Grouard S., Goudiaby H., Morales Aguilar C., Limondin-Lozouet N., Cavero J., Develle A.-L., Hatté C., Gauthier C., Lanos P., Mokadem F., Sipos G., Nature et dynamique du socio-écosystème maya du territoire de subsistance de la cité de Naachtun entre 1500 BCE et 1000 CE (Petén, Guatemala). In Nicoud E., Balasse M., Desclaux E., Théry-Parisot I. (eds), *Biodiversités, environnements et sociétés depuis la Préhistoire : nouveaux marqueurs et approches intégrées, 41es Rencontres internationales d'archéologie et d'histoire de Nice Côte d'Azur, 11-14 Octobre 2021*. APDCA CEPAM, Nice.
- 2021** Castanet C., Nondédéo P., Dussol L., Testé M., Purdue L., Hiquet J., Lemonnier E., Garnier A., Goudiaby H., Dorison A., Tomadini N., Morales Aguilar C., Limondin-Lozouet N., Cavero J., Develle A.-L., Hatté C., Lanos P., Mokadem F., Sipos G., Dynamique du socio-écosystème maya du territoire de subsistance de la cité de Naachtun (Petén, Guatemala) entre 1500 av. et 1000 apr. J.-C. Développements méthodologiques et résultats préliminaires d'une approche systémique multiscalaire. In *CIST2020 - Population, Temps, Territoires*. Collège international des sciences territoriales (CIST), Paris Aubervillier, pp. 204–209.
- 2018** Nondédéo P., Garrido L., Sion J., Perla D., Hiquet J., Quiñonez J., Begel J., Cotom J., Lemonnier E., Morales Aguilar C., Castanet C., Barrientos I., Purdue L., Patrois J., Andrieu C., Díaz A., Dussol L., Testé M., Garnier A., Michelet D., Coli M., Rodas R. (2018) La temporada 2017 del Proyecto Naachtun (2015-2018). In Arroyo B., Mendez L., Aju G., *XXXI Simposio de investigaciones arqueológicas en Guatemala, 2017: Museo Nacional de Arqueología y Etnología 17 al 21 de julio de 2017*, Ministerio de Cultura y Deporte, Instituto de Antropología e Historia (Guatemala), Asociación Tikal, Guatemala, pp. 331-345.
- 2016** Nondédéo P., Garrido L., Patiño A., Lacadena A., Michelet D., Hiquet J., Cotom J., Castanet C., Perla D., Goudiaby H., Patrois J., Gillot C., Díaz A., Estrada P., Quiñonez J., Barrientos I., Dussol L., Andrieu C., Schwendener O., Colin M., En busca del Clásico temprano: la temporada 2015 del Proyecto Naachtun (2015-2018) Peten. In Arroyo B., Mendez L., Aju G. (eds), *XXIX Simposio de Investigaciones Arqueológicas en Guatemala, 2015: Museo Nacional de Arqueología y Etnología 20 al 24 de Julio de 2015*. Ministerio de Cultura y Deporte, Instituto de Antropología e Historia (Guatemala), Asociación Tikal, Guatemala, pp. 189-198.
- 2014** Nondédéo P., Garrido L., Patiño A., Lacadena A., Cases I., Lemonnier E., Michelet D., Hiquet J., Andrieu C., Morales Aguilar C., Cotom-Nimatuj J., Purdue L., Perla D., Goudiaby H.,

González G., Gillot C., Díaz A., Quiñonez J., Barrientos I., Sion J., **Dussol L.**, Colin M., Una mirada hacia Naachtun después de cinco años de investigación (Proyecto Naachtun 2010-2014). In Arroyo B., Mendez L., Paiz Aragón, L. (eds), *XXVIII Simposio de Investigaciones Arqueológicas en Guatemala, Museo Nacional de Arqueología y Etnología 14 al 18 de Julio de 2014*. Ministerio de Cultura y Deporte, Instituto de Antropología e Historia (Guatemala), Asociación Tikal, Guatemala, pp. 115-123.

- 2013** Nondédéo P., Morales Aguilar C., Cases I., Lacadena A., Dominique M., Lemonnier E., Cotom-Nimatuj J., Caal J., Sion J., Gillot C., Hiquet J., Díaz A., Estrada P., Forné M., Martínez G., Andrieu C., Isaac B., Perla D., Garrido L., Patiño A., Castanet C., Goudiaby H., Patrois J., Quiñonez J., **Dussol L.**, Schwendener O., Colin M., Melía E., La temporada 2013 del Proyecto Naachtun: primeros resultados. In Arroyo B., Mendez L. (eds), *XXVII Simposio de Investigaciones Arqueológicas en Guatemala, 2013: Museo Nacional de Arqueología y Etnología 22 al 26 de Julio de 2013*. Ministerio de Cultura y Deporte, Instituto de Antropología e Historia (Guatemala), Asociación Tikal, Guatemala, pp. 823-834.

Technical reports

- 2020** Castanet C., **Dussol L.**, Fernandes A., Goudiaby H., *Análisis ambientales e isotópicos del sitio arqueológico Naachtun (Petén-Norte, Guatemala): Informe sobre los análisis realizados sobre los materiales exportados en 2018*. CNRS-CEMCA, Guatemala.
- 2019** **Dussol L.**, Análisis antracológicos. In Nondédéo P., Begel J., Michelet D., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2015-2018: Informe de la novena temporada de campo 2018*. CNRS-CEMCA, Guatemala, pp. 201–210.
- 2019** Nondédéo P., **Dussol L.**, La Estructura V y la cuestión funeraria. In Nondédéo P., Begel J., Michelet D., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2015-2018: Informe de La Novena Temporada de Campo 2018*. CNRS-CEMCA, Guatemala, pp. 231–256.
- 2018** Castanet C., **Dussol L.**, Testé M., Coggiola P., Garnier A., Lemonnier E., Limondin-Lozouet N., Oxlaj E., Purdue L., *Análisis ambientales del sitio arqueológico Naachtun (Petén-Norte, Guatemala): Informe provisional de la fase 2017*. CNRS-CEMCA, Guatemala.
- 2018** **Dussol L.**, Análisis antracológico. In Nondédéo P., Michelet D., Begel J., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2015-2018: Informe de la octava temporada de campo 2017*. CNRS-CEMCA, Guatemala, pp. 293–298.
- 2017** **Dussol L.**, *Análisis antracológico del sitio arqueológico Naachtun (Petén-Norte, Guatemala): Informe final de la cuarta fase 2016*. CNRS-CEMCA, Guatemala, Guatemala.
- 2016** **Dussol L.**, Análisis antracológico. In Nondédéo P., Michelet D., Sion J., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2015-2018: Informe de la séptima temporada de campo 2016*. CNRS-CEMCA, Guatemala, pp. 333–342.
- 2016** **Dussol L.**, Análisis antracológico, depósitos y contextos especiales. In Nondédéo P., Michelet D., Hiquet J., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2015-2018: Informe de la sexta temporada de campo 2015*. CNRS-CEMCA, Guatemala, pp. 415–433.
- 2015** **Dussol L.**, *Análisis antracológico del sitio arqueológico Naachtun (Petén-Norte, Guatemala): Informe final de la tercera fase 2014-2015*. CNRS-CEMCA, Guatemala.
- 2014** **Dussol L.**, Análisis antracológico. In Nondédéo P., Hiquet J., Michelet D., Sion J., Garrido L. (eds), *Proyecto Petén-Norte Naachtun 2010-2014: Informe de la quinta temporada de campo 2014*. CNRS-CEMCA, Guatemala, pp. 565–578.

- 2014** Dussol L., Análisis antracológico. In Nondédéo P., Morales-Aguilar C., Sion J., Michelet D., Andrieu C. (eds), *Proyecto Petén-Norte Naachtun 2010-2014: Informe de La Cuarta Temporada de Campo 2013*. CNRS-CEMCA, Guatemala, pp. 531–550.
- 2014** Dussol L., *Análisis antracológico del sitio arqueológico Naachtun (Petén-Norte, Guatemala): Informe final de la segunda fase 2013-2014*. CNRS-CEMCA, Guatemala.
- 2013** Dussol L., Análisis antracológico preliminar. In Michelet D., Morales-Aguilar C., Sion J., Nondédéo P. (eds), *Proyecto Petén-Norte Naachtun 2010-2014: Informe de la tercera temporada de campo 2012*. CNRS-CEMCA, Guatemala, pp. 259–266.
- 2013** Dussol L., Membrives C., Etude anthracologique. In Spiesser J., *Rapport de sondages archéologiques menés en 2013 sur la villa gallo-romaine du Grésil*. SRA Normandie. pp. 88-97.

Conferences

Invited conference

- 2022** Dussol, L., El impacto de los antiguos Mayas en las selvas tropicales de las tierras bajas: pistas de la antracología. In “Conversatorio Interacciones entre bosques y sociedades”, conference organized at the University del Valle de Guatemala, Guatemala City, January 28, 2022, with Plinio Sist (CIRAD), Tomas Barrientos (UVG) and Daniel Ariano (UVG).

Oral presentations

- 2022** Bérard B., Blanot M., Carazzo G., Chapuis O., Dussol L., Ecrabet M., Elliott M., Fouéré P., Pauline G., Gronnier M., Laforge M., Lejeune A.-M., Manem S., Mestre M., Queffelec A., Rothenberg M., Mirco-regional approach to Martinique Early Ceramic occupation. 29th congress of the International association for Caribbean archaeology (AIAC), Varadero, Cuba, June 26 – July 3, 2022.
- 2022** Elliott M., Borejzsa A., Dussol L., The elusive ecological footprint of Archaic-period societies in Mesoamerica. International conference Quaternary 13, Strasbourg, France, March 14-18, 2022.
- 2021** Nondédéo P., Castanet C., Lemonnier E., Purdue L., Dussol L., Testé M., Hiquet J., Dorison A., Landscape, settlement patterns, and agrarian strategies: the case of Naachtun and its hinterland during the Preclassic and the Classic periods. 26th European Maya Conference “Ancient Maya agriculture, from practice to mythology”, Bratislava, Slovakia, December 7-11, 2021.
- 2021** Dussol L., Hirth K., Scheffler T., Des chasseurs-cueilleurs paléindiens aux horticulteurs mésoaméricains : première séquence anthracologique holocène dans les hautes terres du Honduras (11 000-1000 BP). International study day “Interdisciplinary exchanges on wood and societies”, Paris, France, October 18-19, 2021.
- 2021** Dussol L., Vannière B., Purdue L., Castanet C., Orange F., Testé M., Lemonnier E., Garnier A., Nondédéo P., Théry-Parisot I., Fuel and fire in pre-Columbian agroforestry: the Maya Lowland site of Naachtun, Guatemala. International conference “Historical Ecology for the Future”, Metz, France, May 24-28, 2021 (virtual conference).
- 2021** Castanet C., Nondédéo P., Dussol L., Testé M., Purdue L., Hiquet J., Lemonnier E., Garnier A., Dorison A., Tomadini N., Grouard S., Goudiaby H., Morales-Aguilar C., Limondin-Lozouet N.,

- Cavero J., Develle-Vincent A.-L., Hatté C., Lanos P., Mokadem F., Sipos G., 2021. Dynamics and sustainability of the Maya socio-ecosystem of the hinterland of Naachtun, between 1500 BCE and 1000 CE (Southern Maya Lowlands, Petén, Guatemala). General Assembly of the European Geosciences Union, Vienna, Austria, April 19-30, 2021 (virtual conference).
- 2020** Castanet C., Nondédéo P., **Dussol L.**, Testé M., Purdue L., Hiquet J., Lemonnier E., Garnier A., Goudiaby H., Dorison A., Tomadini N., Grouard S., Morales-Aguilar C., Limondin N., Cavero J., Develle-Vincent A.-L., Hatté C., Lanos P., Mokadem F., Sipos G., Dynamics of the Maya socio-ecosystem of the hinterland of Naachtun (Petén, Guatemala) between 1500 BCE and 1000 CE: methodological developments and preliminary results of a multiscale systemic approach. 5th International conference of the CIST “Population, time, territories”, Paris, France, November 18-20, 2020.
- 2020** Hiquet J., Castanet C., **Dussol L.**, Nondédéo P., Purdue L., Dorison A., Tomadini N., After the collapse, an interdisciplinary contextualization of the rise of Naachtun (Guatemala). 26th annual congress of the European Association of Archaeologists (EAA), August 26-30, 2020 (virtual conference).
- 2019** Purdue L., **Dussol L.**, Testé M., Lemonnier E., Blasco T., Montanes M., Castanet C., Garnier A., Nondédéo P., Identification and characterization of ancient agricultural landscapes and practices in upland tropical environments (Central Maya Lowlands, Naachtun, Guatemala). International conference “Millennial Tropical Agriculture” (MilAgro), Nice, France, October 1-3, 2019.
- 2019** Castanet C., Fernandes A., Garnier A., Testé M., Bompard M., Cavero J., Devel A.-L., Sipos G., **Dussol L.**, Lemonnier E., Purdue L., Nondédéo P., Hydro-agro-system of the wetlands in the Central Maya Lowlands: the wetland features of the bajos in the hinterland of Naachtun (Petén tropical forest, Guatemala). International conference “Millennial Tropical Agriculture” (MilAgro), Nice, France, October 1-3, 2019.
- 2019** **Dussol L.**, Purdue L., Vannière B., Testé M., Castanet C., Morell-Hart S., Lemonnier E., Garnier A., Théry-Parisot I., Fire use and agroforestry in tropical forest (Guatemala), a multi-proxy study of swidden cultivation. 7th International congress of anthracology, Liverpool, UK, September 2-6, 2019.
- 2018** Nondédéo P., Sion J., **Dussol L.**, Materialidad y depósitos en Naachtun: ensayo sobre función, temporalidad y significado de los rituales mayas tardíos del periodo Clásico. International congress of the Research Group “RITMO”, Paris, France, November 14-15, 2018.
- 2018** **Dussol L.**, Nondédéo P., Sion J., Michelet D., Después del abandono: ritos de fuego tardíos en la ciudad maya de Naachtun. International workshop of the Research Group “RITMO”, Bonn, Germany, May 31 - June 1, 2018.
- 2018** Nondédéo P., Castanet C., Purdue L., Lemonnier E., **Dussol L.**, Garnier A., Testé M., Archaeological and paleo-environmental reconstructions in the tropical Maya area: the case of Naachtun (Guatemala). 28th congress of the International Union for Prehistoric and Protohistoric Sciences (UISPP), Paris, France, June 4-9, 2018.
- 2018** **Dussol L.**, Purdue L., Lemonnier E., Michelet D., Nondédéo P., Domesticated forests? Interpreting agroforestry practices from diachronic trends in firewood collection at the classic Maya city of Naachtun (Northern Peten, Guatemala). Annual meeting of the Society for American Archaeology (SAA), Washington DC, USA, April 3-7, 2018.
- 2017** **Dussol L.**, Ritual fires and ancient Maya termination deposits at Naachtun (Guatemala): and archaeobotanical perspective. Annual meeting of the Society for American Archaeology, Vancouver, Canada, March 29 – April 2, 2017.

- 2017** Goudiaby H., **Dussol L.**, Ashes to ashes, dust to dust: the role of wood in ancient Maya funerary sequences. Annual meeting of the Society for American Archaeology, Vancouver, Canada, March 29 – April 2, 2017.
- 2017** Castanet C., Purdue L., Testé M., Garnier A., Lemonnier E., Nondédéo P., Develle A.-L., Mokadem F., **Dussol L.**, Hydrological and socio-environmental dynamics in subtropical Maya lowlands: alluvial geoarchaeological approach of the wetlands around Naachtun during the last 4 millennia (Peten, Guatemala). 9th International conference of geomorphology, New Delhi, India, November 6-11, 2017.
- 2016** **Dussol L.**, Elliott M., Charcoal analysis to reconstruct ancient wood economy at Naachtun. Annual meeting of the Society for American Archaeology (SAA), Orlando, USA, April 6-10, 2016.
- 2016** Purdue L., **Dussol L.**, Castanet C., Lemonnier E., Garnier A., Where and how did the Maya practice agriculture in the Classic period city of Naachtun, Guatemala? Annual meeting of the Society for American Archaeology (SAA), Orlando, USA, April 6-10, 2016.
- 2015** **Dussol L.**, Elliott M., Ancient agroforestry in the Maya rainforest. New developments in Neotropical anthracology at the site of Naachtun (Guatemala). 6th International congress of anthracology, Fribourg, Germany, August 30 – September 6, 2015.
- 2015** Goudiaby H., **Dussol L.**, Nondédéo P., Prácticas y secuencias funerarias mayas en el periodo Clásico: de las élites reales a las unidades residenciales. International workshop of the Research Group “RITMO”, Royaumont Abbey, France, Octobre 2015.
- 2013** Michelet D., Lemonnier E., **Dussol L.**, De algunas relaciones sociedad – medio ambiente: el caso de Río Bec. International festival of Maya culture, Merida, Mexico, October 17, 2013.
- 2013** **Dussol L.**, Fuegos y selva maya. Análisis antracológico sistemático del sitio Naachtun, una capital regional de las Tierras Bajas centrales. Doctoral day of Americanists, Brussel, Belgium, November 2013.

Poster presentations

- 2022** Trabon C., **Dussol L.**, Elliott M., Bérard B., Fire and fuelwood in Martinique during the Early Ceramic age: anthracological approach. 29th congress of the International association for Caribbean archaeology (AIAC), Varadero, Cuba, June 26 – July 3, 2022.
- 2019** **Dussol L.**, How to identify fire use by pre-Columbian Maya farmers? International conference “Millennial Tropical Agriculture” (MilAgro), Nice, France, October 1-3, 2019.
- 2019** **Dussol L.**, Ancient Maya agroforestry, applying anthracology to urban settings in high biodiversity tropical environments. International conference “Millennial Tropical Agriculture” (MilAgro), Nice, France, October 1-3, 2019.
- 2019** **Dussol L.**, Boucher P., Purdue L., A new multidisciplinary baseline for understanding the development, functions and impact of ancient agroforestry technologies in the Neotropics. Joint BES/gtö symposium “Unifying Tropical Ecology: Strengthening collaborative science”, Edinburg, UK, April 8-12, 2019.
- 2018** **Dussol L.**, Comparing anthracological and archaeological sequences to reconstruct socio-environmental dynamics at Naachtun, Guatemala. 28th congress of the International Union for Prehistoric and Protohistoric Sciences (UISPP), Paris, France, June 4-9, 2018.

- 2015 Dussol L.**, Forêts Mayas. Reconstituer les anciens modes d'exploitation du bois. Award ceremony of the L'Oréal-UNESCO Foundation, For women in science programme, Paris, France, October 1, 2015.
- 2014 Dussol L.**, À la recherche des pins perdus. Exploitation et usages du bois de pin par les Mayas des Basses Terres à la période classique : l'exemple du site de Naachtun (Petén, Guatemala). Annual meeting of the Research Group in Wood Sciences, Nancy, France, November 12-14, 2014. Prize of best poster.
- 2013 Dussol L.**, Elliot M., Pereira G., Michelet D., Feux funéraires vs Feux domestiques. Étude anthracologique d'un site maya au Classique Terminal. Annual meeting of the Research Group in Wood Sciences, Champs-sur-Marne, France, November 19-21, 2013.

Volunteer excavation activities

- 2011 Le Castelet** (Bouches-du-Rhône, France), Protohistoric period. Dir. Elodie Martin and Julie Clerc, Aix-Marseille Université. 2-week excavation campaign.
- 2011 Lake Patzcuaro Basin** (Michoacan, Mexico), Epiclassic period. Dir. Chris Fisher, Colorado State University. 3-week pedestrian prospection campaign.
- 2010 Constantine** (Bouches-du-Rhône, France), Protohistoric period. Dir. Florence Verdin, University Bordeaux III. 3-week excavation campaign.
- 2010 La Butte-Saint Antoine** (Var, France), Gallo-Roman period. Dir. Lucien Rivet, CNRS. 3-week excavation campaign.
- 2009 Constantine** (Bouches-du-Rhône, France), Protohistoric period. Dir. Florence Verdin, University Bordeaux III. 3-week excavation campaign.

Media outreach

Public conferences

- 2022 Invited speaker at the Night of Ideas 2022 “(Re)build together”**, Guatemala City, Guatemala, January 27, 2022. Conference-debate “Community concessions in Petén: a model for the future of tropical forests” organized by the French Alliance and the Center for Mexican and Central-American Studies (CEMCA). Broadcast live on social networks.
<https://www.facebook.com/alianzafrancesagt/videos/noche-de-ideas-los-bosques-tropicales-tienen-un-futuro/350938573352055>
- 2015 Invited speaker at the Pint of Science Festival France**, Paris, France, November 9, 2015. Organized by the L'Oréal UNESCO Foundation and the Pint of Science Association.

Video Recordings

- 2016 Speaker** in “Naachtun, the forgotten Maya city”, scientific documentary (1h33) directed by Stéphane Bégoïn. Producer: Arte France, Les Films à Cinq. Distributor: Arte. Sixteen scientist contributors. First broadcast June 18, 2016, three times rebroadcast in France, translated into Spanish and English and broadcast in Central America, South America and the USA.

Broadcast Interviews

2016 [1.](#) 2016/08/11 Topics: 1) Interactions society-environment in the Maya Lowlands 2) Place of women in archaeological research, “Les 30 Glorieux” radio program, Europe 1.

Text Interviews

2015 [1.](#) 2015/10/05 Topics: Personal experience as woman scientist and archaeologist in the Maya area, *Le Journal de l'île*, daily newspaper, Reunion Island, France.

2015 [2.](#) 2015/10/02 Topics: Personal experience as woman scientist and archaeologist in the Maya area, *Le Quotidien*, daily newspaper, Reunion Island, France.

2015 [3.](#) 2015/10/01 Topics: Personal experience as woman scientist and archaeologist in the Maya area, *Femme Magazine*, monthly edited women's magazine, Reunion Island, France.