

Stéphanie Manel, Directeur D'Études

Listes des publications des 5 dernières années.

Liste complète :

- <https://sites.google.com/site/stephaniemanel/publications-2>
- <https://scholar.google.fr/citations?user=fCTX6G8AAAAJ&hl=en>

2021

- Sunrise et al. (accepted) How many replicates to accurately estimate fish biodiversity using environmental DNA on coral reefs. **Ecology and Evolution**.
- Donati G, Zemp N, Manel S, et al. (accepted) Species ecology explains the spatial components of genetic diversity in tropical reef fishes. **Proceedings of Royal Society B**
- Leigh DM, van Rees CB, Millette KL, Breed MF, Schmidt C, Bertola LD, Hand BK, Hunter ME, Jensen EL, Kershaw F, Liggins , Gordon L, Manel S, Mergeay J, Miller JM, Segelbacher G, Hoban S, Paz-Vinas I (2021) Opportunities and challenges of macrogenetic studies. **Nature Reviews Genetics**.
- Polanco FA, Martinezguerra MM, Marques V, Villa-Navarro F, Perez GHB, Cheutin MC, Dejean T, Hocde R, Juhel JB, Maire E, Manel S, Spescha, Valentini A, Mouillot D, Albouy C, Pellissier L (2021) Detecting aquatic and terrestrial biodiversity in a tropical estuary using environmental DNA. **Biotropica**.
- Polanco et al. (2021) Comparing the performance of 12S mitochondrial primers for fish environmental DNA across ecosystems. **Environmental DNA**.
- Loiseau et al. (2021) Maximizing regional biodiversity requires a mosaic of protection levels. *Plos Biology*. 19. e3001195.
- Benestan L, Fietz K, Loiseau N, Guerin PE, Trofimenko E, Rühls S, Schmidt C, Rath W, Biastoch A, Perez-Rufaza A, Baixauli P, Forcada A, Arcas E, Lenfant P, Goni R, Velez L, Höppner M, Kininmonth S, Mouillot D, Puebla O, Manel S (2021) Restricted dispersal in a sea of gene flow. **Proceedings of the Royal Society B** 288.
- Mathon et al. (2021) Benchmarking bioinformatics tools for fast accurate eDNA metabarcoding species identification. *Mol Ecol Resources*.
- Concepción M, Díaz D, Fietz K, Forcada A, Ford A, García-Charton JA, Goñi R, Lenfant P, Mallol S, Mouillot D, Pérez-Marcos M, Puebla O, Manel S, Pérez-Ruzafa A (2021) Reviewing the ecosystem services, societal goods and benefits of marine protected areas. **Frontiers in Marine Science**. 8.
- Boulanger E, Loiseau N, Valentini A, Arnal A, Boissery B, Dejean T, Deter J, Guellati G, Holon F, Juhel JB, Lenfant P, Manel S, Mouillot D Environmental DNA metabarcoding reveals and unpacks a biodiversity conservation paradox in Mediterranean marine reserves (2021) **Proceedings of the Royal Society B**.
- Andrello M., Noirot C, Debarre F, Manel S. (2021) MetaPopGen2.0: a multilocus genetic simulator to model populations of large size. **Molecular Ecology Resources**. 21:596-608.
- Polanco Fernández A, Marques V, Fopp F, Juhel J-B, Borrero-Pérez GH, Cheutin M-C, Dejean T, González Corredor JD, Acosta-Chaparro A, Hocdé R, et al. (2021) Comparing environmental DNA metabarcoding and underwater visual census to monitor tropical reef fishes. **Environmental DNA** 3, 142-156.
- Juhel JB et al. (2021) Detection of the elusive Dwarf sperm whale (*Kogia sima*) using environmental DNA at Malpelo island (Eastern Pacific, Colombia). **Ecology and Evolution**.
- Blanco-Pastor JL et al. (2021) Canonical correlations reveal adaptive loci and phenotypic responses to climate in perennial ryegrass. **Molecular Ecology Resources**.

2020

- Escalante M, Perrier C, Garcia de Leon F, ... , Manel S (2020) Genotyping by sequencing reveals the effect of riverscape, climate and interspecific introgression on the genetic diversity and local adaptation of the endangered Mexican golden trout. **Conservation Genetics**. 21:907-926.
- Marques V, Milhau T, Albouy C, Dejean T, Manel S, Mouillot D, Juhel JB (2020) GAPeDNA: An application for assessment and visualization of genetic databases completeness for eDNA metabarcoding. **Diversity and Distribution**.
- Marques V, Guérin PE, Rocle M, Valentini A, Manel S, Mouillot D and Dejean T (2020) Blind assessment of vertebrate taxonomic diversity across spatial scales by clustering environmental DNA metabarcoding sequences. **Ecography**. 43:1-12.
- Boulanger E, Dalongeville E, Andrello M, Mouillot D, Manel S (2020) Spatial graph highlight how multi-generational dispersal shapes landscape genetics patterns. **Ecography**. 43:1667-1179.
- Fietz K, Trofimenko E, Guerin PE, Arnal V, Montserrat T-O, Lobréaux S, Pérez-Ruzafa A, Manel S, Puebla O (2020) New genomic resources for three exploited Mediterranean fishes. **Genomics**. 112, 4297-4303.
- Manel S, Guerin PE, Mouillot D., Blanchet S., Velez L., Albouy C, Pellisser L (2020) Global determinants of freshwater and marine fish genetic diversity. **Nature Communications**. 11, 692.

2019

- Manel S. (2019) Smoothing technical and computational obstacles in gene-environment associations. **Molecular Ecology Resources**. 19: 1385-1387.
- Manel S, Loiseau N, Puebla O (2019) Long-distance marine connectivity : poorly understood but potentially important. **Trends in Ecology & Evolution**. 34:688-689.
- Blanco-Pastor JL, Manel S. et al (2019) Pleistocene climate changes, and not agricultural spread, accounts for range expansion and admixture in the dominant grassland species *Lolium perenne* L. **Journal of Biogeography**. 46:1451-1465.
- Razgour O, Forester B., Taggard JB, Bekaert M, Juste J, Ibanez C, Puechmaille J, Fernandez-Novella R, Alberdi A, Manel S (2019) Considering adaptive genetic variation in climate change vulnerability assessment reduces species range loss projections. **Proceedings of the National Academy of Sciences**, 116:10418-10423.
- Manel S, Loiseau N., Andrello M, et al (2019). Benefits of Marine Reserves: Myth or Reality? **Trends in Ecology & Evolution**. 34:342-354.
- Tournebize R, Vigouroux Y, Jakobsson, Poncet V, Manel S (2019) McSwan: a joint site frequency spectrum method to detect and date selective sweeps across multiple population genomes. **Molecular Ecology Resources**. 19: 283-295.

2018

- Pfeifer V, Ford B, Housset J, McCombs A, Blanco-Pastor JL, Goin N, Manel S, Bertin A (2018) Partitioning genetic and species diversity refines our understanding of species-genetic diversity relationships. **Ecology and Evolution**. 8: 12351-12364.
- Manel S, Andrello M, Henry K, Verdelet D, Darracq A, Guerin PE, Desprez B, Devaux P. (2018) Predicting genotypes environmental range from genome-environment associations. **Molecular Ecology**, 27: 2823-2833.
- Dalongeville A., Andrello M., Mouillot D., Lobreaux S., Fortin M. J., Lasram F., Belmaker J., Rocklin D., Manel S. (2018) Geographic isolation and larval dispersal shape seascape genetic patterns differently according to spatial scale. **Evolutionary Applications**. 11: 1437-1447.
- Escalante MA, Garcia-De Leon FJ, Ruiz-Luna A, Landguth E, Manel S (2018) The interplay of riverscape features and exotic introgression on the genetic structure of the Mexican golden

- trout (*Oncorhynchus chrysogaster*), a simulation approach. **Journal of Biogeography**. 45:1500-1514.
- Guerrero J, Andrello M, Burgarella C, Manel S (2018) Soil environment is a key driver of adaptation in *Medicago truncatula*: new insight from landscape genomics. **New Phytologist**. 219:378-390.
- Boussarie G, Bakker J, Wangensteen OS, Mariani S, Bonnin L, Juhel JB, Kiszka JJ, Kulbicki M, Manel S, Robbins WD, et al. 2018. Environmental DNA illuminates the dark diversity of sharks. **Science Advances** 4.
- Dalongeville A., Benestan L, Mouillot D, Lobreaux S, Manel S (2018) Combing six genome scan methods to detect candidate genes to salinity in the Mediterranean striped red mullet (*Mullus surmuletus*). **BMC Genomics**. 19.
- Magris RA, Andrello M, Pressey RL, Mouillot D, Dalongeville A, Jacobi MN, Manel S. (2018) Biologically representative and well-connected marine reserves enhance biodiversity in conservation planning. **Conservation Letters**. 11:UNSP e12439.
- Schoville S, Dalongeville A, Viennois G, Gugerli F, Taberlet P, Lequette L, Alvarez N, Manel S (2018) Preserving genetic connectivity in the European Alps protected area network. **Biological Conservation**. 218:99-109.
- Razgour O, Taggard JB, Manel S, Juste J, Ibanez C, Rebelo H, ALberdi A, Gareth J, Park K (2018) An integrated framework to identify wildlife populations under threat from climate change. **Molecular Ecology Resources**. 18:18-31.

2017

- Tournebize R, Manel S, Vigouroux Y, Munoz F, de Kockko A, Poncet V (2017) Two disjunct pleistocene populations and anisotropic postglacial expansion shaped the current genetic structure of the relict plant *Amborella trichopoda*. **Plos One**. 12(8): e0183412.
- Rochat E, Manel S, Deschamps-Cottin M, Widmer I, Joost S (2017) Persistence of butterfly populations in fragmented landscape habitats along urban density gradients: motility helps. **Heredity**. 119:328-338.
- Andrello M, Henry K, Devaux P, Verdelet D, Desprez B, Manel S (2017) Insights into the genetic relationships among plants of Beta section Beta using SNP markers. **Theoretical and applied genetics**. 130:1857-1866.
- Andrello A, Guilhaumon F, Albouy C, Parravicini V, Scholtens J, Verley P, Barange M, Sumaila UR, Manel S, Mouillot (2017) Global mismatch between fishing dependency and larval supply from marine reserves? **Nature Communications**. 8:16039.
- Paradis E, Gosselin T, Grundwald NJ, Jombart T, Manel S, Lapp H (2017) Towards an integrated ecosystem of R package for the analysis of population genetic data. **Mol Ecol Res**. 17:1-4.
- Bertin A, Gouin N, Baumel A, Gianoli E, Serratos J, Osorio R and Manel S (2017) Genetic variation of loci potentially under selection confounds species-genetic diversity correlations in a fragmented habitat. **Molecular Ecology**. 26:431-443.
- Kamvar ZN, Lopez-Urbe MM, Coughlan S, Grundwald NJ, Lapp H, Manel S (2017) Developing educational resources for population genetics in R: an open and collaborative approach. *Mol Ecol Res*. 17: 120-128.