

MIREIA VALLE

Postdoctoral researcher **BC3-Basque Centre for Climate Change**

Visiting scholar **National Center for Ecological Analysis and Synthesis- NCEAS**

IPBES Fellow & Alumni network coordinator

ResearchGate: https://www.researchgate.net/profile/Mireia_Valle/info

Google Scholar: <https://scholar.google.es/citations?user=3CKhWRoAAAAJ&hl=en>

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BIO

Mireia Valle's research focuses in **biodiversity conservation and nature contributions to people; with a special interest on climate change impacts**. She was graduated in **Environmental Science** in the University of Girona and she got her **PhD** in the University of the Basque Country (UPV-EHU) in **Biodiversity and Ecosystem Functioning and Management** with **International Mention distinction** in 2014, which was awarded with an **excellent-Cum Laude** and the **PhD. Extraordinary Award 2016/2017**.

Currently, Dr. Valle is a **postdoctoral researcher** from the **Basque Centre for Climate Change (BC3)** who has been **awarded a postdoctoral fellowship by the Basque Government**, which covers two years in a foreign research center and a third year in a research institution in the Basque Country. She is at the first year of her research stage at the **National Center for Ecological Analysis and Synthesis- NCEAS** working under the supervision of **Dr. Benjamin S. Halpern** and **Dr. Unai Pascual** from the BC3.

CURRENT POSITION

Institutions	BC3, Basque Centre for Climate Change & National Center for Ecological Analysis and Synthesis- NCEAS
Position	Postdoctoral researcher
Dates	Since March 2018
Tasks	Developing own research project of 3 years under collaboration with BC3 and NCEAS. <i>FutureSea- Envisioning the social-ecological future of seascapes under climate change: Integrating an ecological trait-based approach and social participatory scenario</i> . The project aims to envision the social-ecological futures of seascapes under climate change using a functional trait-based ecosystem approach and a participatory modelling and scenarios approach in order to provide new insight for adaptive ecosystem management and analyse ways to improve policies to help vulnerable societies that depend on marine ecosystems to transit towards more resilient social-ecological systems recommendations.

EDUCATION

Title	Ph.D. in Biodiversity and Ecosystem Functioning and Management
Organization	Faculty of Science and Technology. University of the Basque Country.
Title obtaining date	October 2014
Thesis title	<i>Seagrass meadows under a changing climate: habitat modelling, restoration and monitoring</i>
Mention	Excellent-Cum laude and International Doctor distinction
Award	PhD Extraordinary Award 2016/2017
Title	M.Sc. in Biodiversity and Ecosystem Functioning and Management
Organization	Faculty of Science and Technology. University of the Basque Country.
Title obtaining date	September 2009
Title	B.Sc. in Environmental Science
Organization	Faculty of Science. University of Girona.
Title obtaining date	4th year of Environmental Science in Sweden, University of Uppsala, ERASMUS program June 2007
Title	Associate Degree in Management and Organization of Natural and Landscape Resources
Organization	Secondary Education School of Murgia (Araba)
Title obtaining date	June 2002

PROFESIONAL EXPERIENCE

Institution	Fundación Lurgaia Fundazioa
Position	Researcher and management
Dates	October 2016-January 2018
Tasks	Writing research project proposals and funding applications. Coordination tasks of the activities involving the work of volunteers. Writing projects for CO ₂ compensation. Responsible for the NGO's technical and logistical needs. Organization of monthly talks. Community communication manager of the NGO's activities.
Institution	Universidad Laica Eloy Alfaro de Manabí
Department	Central Research Department
Position	Project leader: Functional ecology of rocky reef ecosystems along the Ecuadorian coast
Dates	October 2014 – April 2016
Tasks	Integral monitoring of the benthic components of rocky reef ecosystems (corals, macroalgae, equinoderms). Habitat mapping and modelling. Laboratory analysis. Data processing. Writing of reports and scientific papers. Participation in international conferences. Supervision of undergraduate thesis. Teaching Aquatic ecosystem conservation course.
Institution	AZTI-Tecnalia
Department	Marine Research Division
Position	Ph.D. Scholarship: "Seagrass meadows under a changing climate: habitat modelling, restoration and monitoring". Funded by: Iñaki Goenaga Foundation.
Dates	October 2009 – October 2013
Tasks	Habitat suitability modelling. Climate change projections. Restoration of intertidal habitats and monitoring. Habitat mapping. Image classification. Laboratory analysis. Data processing. Writing of reports and scientific papers. Participation in international conferences.

INTERNATIONAL PRESENCE

Young Fellow of the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). Selected as young scientist for the IPBES regional assessment for the Americas to participate in the Regional Assessment for the Americas during the period 2014-2018. **IPBES Fellow & Alumni network coordinator** since March 2018.

Participation by invitation in the following meetings and workshops:

- (1) **First author meeting of the Regional Assessment on Biodiversity and Ecosystem Services for the Americas.** Bogotá (Colombia), from 20 to 24 July 2015
- (2) **IPBES Fellows Pilot Programme: Training workshop.** Bonn (Germany), from 7 to 10 December 2015
- (3) **Contribution of Scenarios and Modelling and Capacity Building to the Regional Assessments and the Assessment for Land Degradation and Restoration workshop** (where she participated with an oral presentation). De Bilt (The Netherlands), from 25 to 27 January 2016
- (4) **Workshop on Multiple Values of Biodiversity and Ecosystem Services.** Cali (Colombia), from 16 to 17 October 2016
- (5) **Second Workshop on Scenarios and Modelling for IPBES.** Hayama (Japan), from 15 to 18 November 2016
- (6) **IPBES Fellowship Programme-Capacity Building workshop.** Bilbao (Spain), from 17 to 20 January 2017
- (7) **Fifth session of the Platform's Plenary (IPBES-5).** Bonn (Germany), from 7 to 10 March 2017
- (8) **Third author meeting of the Regional Assessment on Biodiversity and Ecosystem Services for the Americas.** Cartagena de Indias (Colombia), from 5 to 9 July 2017
- (9) **IPBES Fellowship Programme - Capacity-building workshop.** Medellín (Colombia), 17-20 March 2018
- (10) **Sixth session of the Platform's Plenary (IPBES-6).** Medellín (Colombia), 17-24 March 2018
- (11) **IPBES fellowship programme – induction day for the sustainable use of wild species assessment fellows.** Montpellier (France), 02 December 2018.
- (12) **IPBES Youth workshop.** Sao Pedro (Brazil), 27-28 June 2019.

PUBLICATIONS IN PEER-REVIEWED JOURNALS (ISI)

1. Pereira L, Ávila-García D, Champness MR, Familia L, Gerhardinger LC, Harmackova ZV, Metcalf OC, Rana S, Selomane O, Tauli JI, Valle M, von Below J, Zgambo O. **The voices of youth in building positive future scenarios for nature and people.** Submitted to a Special Issue in Ecosystems and People.
2. Coscieme L, da Silva Hyldmo H, Fernández-Llamazares A, Palomo I, Heita Mwampamba T, Selomane O, Sitas N, Jaureguiberry P, Takahashi Y, Lim M, Barral MP, Farinaci JS, Diaz-José J, Ghosh S, Ojino J, Alassaf A, Baatuwwe BN, Balint L, Basher Z, Boeraeve F, Budiharta S, Chen R, Desrousseaux M, Dowo G, Febria C, Ghazi H, Harmackova ZV, Jaffé R, Kalemba MM, Lambini CK, Lasmana FPS, Mohamed AAA, Niamir A, Pliscoff P, Sabyrbekov R, Shrestha UB, Samakov A, Sidorovich AA, Thompson L, Valle M, 2020. **Multiple conceptualizations of nature are key to inclusivity and legitimacy in global environmental governance.** Environmental Science and Policy, 104: 36-42. DOI: <https://doi.org/10.1016/j.envsci.2019.10.018>
3. Sitas N, Harmáčková ZV, Anticamara JA, Arneth A, Badola R, Biggs R, Blanchard R, Brotons L, Cantele M, Coetzer K, DasGupta R, den Belder E, Ghosh S, Guisan A, Gundimeda H, Hamann M, Harrison PA, Hashimoto S, Hauck J, Klatt B, Kok K, Krug RM, Niamir A, O'Farrell PJ, Okayasu S, Palomo I, Pereira LM, Riordan P, Santos-Martín F, Selomane O, Shin Y, Valle M, 2019. **Exploring the usefulness of scenario archetypes in science-policy**

- processes: experience across IPBES assessments.** Ecology and Society 24(3):35. <https://doi.org/10.5751/ES-11039-240335>
4. Muñoz MC, Valle M, White RL, Jaffé R, 2019. **How can we all help conserve nature?** Frontiers of Young Minds 7:84. doi: 10.3389/frym.2019.00084
 5. Soissons L, Haanstra EP, van Katwijk MM, Asmus R, Auby I, Barillé L, Brun FG, Cardoso PG, Desroy N, Fournier J, Ganthy F, Garmendia JM, Godet L, Grilo TF, Kadel P, Ondiviela B, Peralta G, Puente A, Recio M, Rigouin L, Valle M, Herman PMJ, Bouma TJ, 2018. **Latitudinal Patterns in European Seagrass Carbon Reserves: Influence of Seasonal Fluctuations versus Short-Term Stress and Disturbance Events.** Frontiers in Plant Science 9, 88. <https://doi.org/10.3389/fpls.2018.00088>
 6. Soissons LM, van Katwijk MM, Peralta G, Brun FG, Cardoso PG, Grilo TF, Ondiviela B, Recio M, Valle M, Garmendia JM, Ganthy F, Auby I, Rigouin L, Godet L, Fournier J, Desroy N, Barillé L, Kadel P, Asmus R, Herman PM, Bouma TJ, 2017. **Seasonal and latitudinal variation in seagrass mechanical traits across Europe: The influence of local nutrient status and morphometric plasticity.** Limnology and Oceanography 63, 37-46. <https://doi.org/10.1002/lno.10611>
 7. Garmendia JM, Valle M, Borja Á, Chust G, Dae-Jin L, Rodríguez JG, Franco J, 2017. **Effect of trampling and digging from shellfishing on *Zostera noltei* (Zosteraceae) intertidal seagrass beds.** Scientia Marina 81, 121-128. doi: <http://dx.doi.org/10.3989/scimar.04482.17A>
 8. van Tussenbroek B, Soissons L, van Katwijk MM, van der Heide T, Brun F, Peralta G, Cardoso P, Grilo T, Ondiviela B, Valle M, Garmendia JM, Ganthy F, Godet L, Fournier J, Kadel P, Asmus R, Bouma T, 2016. **Pollen limitation may be a common Allee effect in marine hydrophilous plants: implications for decline and recovery in seagrasses.** Oecologia 182, 595-609. <https://doi.org/10.1007/s00442-016-3665-7>
 9. Valle M, Palà V, Lafon V, Dehouck A, Garmendia JM, Borja A, Chust G, 2015. **Mapping estuarine habitats using airborne hyperspectral imagery, with special focus on seagrass meadows.** Estuarine, Coastal and Shelf Science 164: 433-442. <https://doi.org/10.1016/j.ecss.2015.07.034>
 10. Valle M, Garmendia J, Chust G, Franco J, Borja A, 2015. **Increasing the chance of a successful restoration of *Zostera noltii* meadows.** Aquatic Botany 127: 12-19. <https://doi.org/10.1016/j.aquabot.2015.07.002>
 11. Reiss H, Birchenough S, Borja A, Buhl -Mortensen L, Craeymeersch J, Dannheim J, Darr A, Galparsoro I, Gogina M, Neumann H, Populus J, Rengstorf AM, Valle M, van Hoey G, Zettler ML, Degraer S., 2014. **Benthos distribution modelling and its relevance for marine ecosystem management.** ICES Journal of Marine Science 72: 297-315. <https://doi.org/10.1093/icesjms/fsu107>
 12. Valle M, Chust G, del Campo A, Wisz MS, Olsen SM, Garmendia JM, Borja A, 2014. **Projecting future distribution of the seagrass *Zostera noltii* under global warming and sea level rise.** Biological Conservation 170: 74-85. <https://doi.org/10.1016/j.biocon.2013.12.017>
 13. Chust G, Albaina A, Aranburu A, Borja Á, Diekmann OE, Estonba A, Franco J, Garmendia JM, Iriondo M, Muxika I, Rendo F, Rodríguez JG, Ruiz-Larrañaga O, Serrão EA, Valle M, 2013. **Connectivity, neutral theories, and the assessment of species vulnerability to global change in temperate estuaries.** Estuarine Coastal and Shelf Science 131: 52-63. <https://doi.org/10.1016/j.ecss.2013.08.005>
 14. Valle M, van Katwijk MM, de Jong DJ, Bouma T, Schipper AM, Chust G, Benito BM, Garmendia JM, Borja A, 2013. **Comparing the performance of species distribution models of *Zostera marina*: implications for conservation.** Journal of Sea Research 83: 56-64. <https://doi.org/10.1016/j.seares.2013.03.002>
 15. Chust G, Borja A, Caballero A, Irigoien X, Saenz J, Moncho R, Marcos M, Liria P, Hidalgo J, Valle M, Valencia V, 2011. **Climate change impacts on coastal and pelagic environments in the southeastern Bay of Biscay.** Climate Research 48:307-332. <https://doi.org/10.3354/cr00914>
 16. Valle M, Borja A, Chust G, Galparsoro I, Garmendia J, 2011. **Modelling suitable estuarine habitats for *Zostera noltii*, using Ecological Niche Factor Analysis and Bathymetric LiDAR.** Estuarine Coastal and Shelf Science 94: 144-154. <https://doi.org/10.1016/j.ecss.2011.05.031>

BOOK CHAPTERS AND ARTICLES IN OTHER JOURNALS

1. Ometto J.P.; Gadda T.; Toledo P.; Pires A.P.F.; Amaral A.G.; Siqueira M.F.; Gondim L.; Affe H.M.J.; Carnaval A.C.; Anjos L.; Lapola D.M.; Valle M.; Randow C.; Tejada G.; Domingues T.F.; Loyola R.D. **Capítulo 4: Interações entre Natureza e Sociedade: trajetórias do presente ao futuro.** In Joly C.A.; Scarano F.R.; Seixas C.S.; Metzger J.P.; Ometto J.P.; Bustamante M.M.C.; Padgurschi M.C.G.; Pires A.P.F.; Castro P.F.D.; Gadda T.; Toledo P. (eds.) (2019). 1º Diagnóstico Brasileiro de Biodiversidade e Serviços Ecosistêmicos. Editora Cubo, São Carlos, pp. 214-262.
2. Klatt B, García Márquez JR, Ometto JP, Valle M, Mastrangelo ME, Gadda T, Pengue WA, Ramírez Hernández W, Baptiste Espinosa MP, Wilson S, Acebey Quiroga SV, Blanco MV, Agard J, Guezala Villavicencio MC. **Chapter 5: Current and future interactions between nature and society.** In IPBES (2018): The IPBES regional assessment report on biodiversity and ecosystem services for the Americas. Rice, J., Seixas, C. S., Zaccagnini, M. E., Bedoya-Gaitán, M., and Valderrama, N. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany, pp. 437-521.
3. Garmendia, JM., Chust G, Valle M, Borja Á, Franco J, 2015. **Praderas de angiospermas marinas del País Vasco.** In: Ruiz, J.M., Guillén, J.E., Ramos Segura, A. & Otero, M.M. (Eds.). Atlas de las praderas marinas de España. IEO/IEL/UICN, Murcia-Alicante-Málaga, pp 595-624.
4. Zorrozuza N, Bald J, Chust G, Galparsoro I, Valle M, 2015. **Análisis de la idoneidad del hábitat de la almeja fina (*Ruditapes decussatus*) y el berberecho (*Cerastoderma edule*) en el estuario del Oka (País Vasco, norte de España).** Revista de Investigación Marina, AZTI-Tecnalia, 22: 1-14.
5. Garmendia J.M., Valle M., Borja A., Chust G, Franco J, 2013. **Cartografía de *Zostera noltii* en la costa vasca: cambios recientes en su distribución (2008-2012).** Revista de Investigación Marina, AZTI-Tecnalia, 20: 1-22.
6. Gorostiaga JM, Irigoien X, Borja A, Fernandes JA, Chifflet M, Gonzalez M, Revilla M, Bald J, Valle M, Garmendia JM, Valencia V, Fontán A, Chust G., 2011. **Biodiversidad, ecosistemas y recursos marinos.** In: Servicio Central

de Publicaciones del Gobierno Vasco (Eds.) Cambio climático, impactos y adaptación en la Comunidad Autónoma del País Vasco, Vitoria-Gasteiz, pp 53-63.

7. Valle M., Borja A., Galparsoro I., Garmendia J.M., Chust G., 2010. **Estudio del hábitat idóneo para *Zostera noltii* y su modificación bajo un escenario de cambio climático en el estuario del Oka**. Revista de Investigación Marina 17: 1-12.

MOST RELEVANT COURSES AND MEETINGS

- **Data Science and Collaboration Skills for Integrative Conservation Science**. Intensive 4-day workshop held at NCEAS, University of California Santa Barbara from Feb 18 to Feb 21, 2020. Training sponsored by Science for Nature and People Partnership (SNAPP) to promote scientific computing and open science best practices. 34 academic hours
- **COMPASS workshop: Communicating your science**. 8 September 2019, Gothenburg School of Economics (Sweden). Early-career event at ICES Annual Science Conference 2019
- **"Using Design Thinking to Solve Environmental Challenges"** course/workshop led by Bre Przechodzinski post-doctoral research associate at the University of San Diego (USD) and Kareem Collie Director of Design and Creativity at the Sontag Center for Collaborative Creativity (a.k.a. The Hive). Workshop organized by the Latin American Fisheries Fellowship Program hosted by the Bren School's Sustainable Fisheries Group (University of California Santa Barbara UCSB). 1-2 June 2019. 16 academic hours
- Enrolled in **Introduction to Resilience for Development: a Massive Open Online Course**. Organized by: UNDP, in collaboration with SwedBio. (31 October- 27 November, 2017).
- Curso básico online **Servicios de los Ecosistemas y Bienestar Humano en Euskadi**. Organized by: Cátedra UNESCO sobre Desarrollo Sostenible y Educación Ambiental de la UPV/EHU and UNESCO Etxea – Centro UNESCO del País Vasco. 15 academic hours (3-21 July, 2017)
- Participation on the **BC3 Summer School "Climate Change in an Era of Uncertainty"**. Directors: Dr. Mikel González-Eguino (BC3, Basque Centre for Climate Change) and Dr. Alberto Ansuategi (University of the Basque Country). Organized in collaboration with the University of the Basque Country. San Sebastian, Spain. 30 academic hours (5-7 July, 2017).
- Participation on the **Klimagune 2017. Climate change and public engagement**. Coordinator: Ignacio Palomo, Postdoctoral Researcher at Basque Centre for Climate Change (BC3). Leioa, Spain. 8 academic hours (31 May, 2017).
- Participation on the **11th ALTER-Net Summer School Challenge your knowledge on biodiversity & ecosystem services**. Conveners: Allan D. Watt (Centre for Ecology and Hydrology, UK), Taru Peltola (Finnish Environment Institute, Finland/ IRSTEA, France), Steve Redpath (Aberdeen University, UK), Uta Fritsch (EURAC-European Academy, Italy) and Marie Vandewalle (Helmholtz Centre for Environmental Research- UFZ, Germany). Peyresq- Alpes de Haute Provence, France. 80 academic hours (7-17 September, 2016). Granted with a scholarship that covered the cost of the tuition fee (800€).
- Participation on the **BC3 Summer School Climate Change Challenges after Paris agreement**. Directors: Dr. Ibon Galarraga (BC3, Basque Centre for Climate Change) and Dr. Marta Escapa (University of the Basque Country). Organized in collaboration with the University of the Basque Country. San Sebastian, Spain. 30 academic hours (11-13 July, 2016).
- Participation on the **DEVOTES-EUROMARINE SUMMER SCHOOL 2016- Marine ecosystem services, management and governance: linking social and ecological research**. Director: Dr. Ángel Borja Yerro (AZTI-Tecnalia, Marine Research Division). San Sebastian, Spain. 18 academic hours (6-9 June, 2016).
- Participation on the **International Spring University on Ecosystem Services Modeling** Fourth Edition. An event co-convened by BC3, Basque Centre for Climate Change, in collaboration with the University of Vermont. Bilbao, Spain. 80 academic hours (2-13 May, 2016). **Granted with a scholarship** that covered the cost of the tuition fee (975€).
- **I Congreso Nacional de Ciencias Ambientales**. Organizer: Facultad de Agropecuarias. Universidad Laica Eloy Alfaro de Manabí. Manta, Ecuador. 40 academic hours (23-25 September, 2015).
- **XXXVIII Jornadas Nacionales de Biología**. Organizer: Universidad Laica Eloy Alfaro de Manabí. Manta, Ecuador. 40 academic hours (27-29 November, 2014).
- Training on **"Valuation and mainstreaming of biodiversity and ecosystem services"**. Organizer: Conservation Training: open, online learning resource that provides high-quality educational content on a broad set of conservation issues. 10 academic hours (January, 2014).
- Summer course **"Addressing climate change challenges from a multidisciplinary perspective"**. Directors: Prof. Anil Markandya (BC3, Basque Centre for Climate Change) and Dr. Mikel Gonzalez (BC3, Basque Centre for Climate Change and UPV/EHU, University of the Basque Country). San Sebastian, Spain. 30 academic hours (8-10 July, 2013).
- **VIII Course of the Global Biodiversity Information Facility in Ecological Niche Modelling**. Teacher: Blas M. Benito (Grupo iEcolab, Centro Andaluz de Medio Ambiente – Universidad de Granada). Madrid, Spain. 30 academic hours (24-27 April, 2012).
- Participation in the **Spring School 'Habitat distribution models and their applications in ecology, evolutionary ecology and conservation'** 35 academic hours (12-16 March 2012). Organized by: W. Thuiller, A. Guisan & N.E. Zimmermann.
- International Conference **"Biscay and the Millennium Ecosystem Assessment. From local to global and vice-versa"**. Organizers: The Regional Government of Biscay, the UNESCO Chair on Sustainable Development and Environmental Education of the University of the Basque Country (Spain) and UNESCO Etxea. Bilbao, Spain. (25-26 November, 2010).
- Summer course **"Sustainability in the marine environment"**. Director: Dr. Ángel Borja Yerro (AZTI-Tecnalia, Marine Research Division). San Sebastian, Spain. 30 academic hours (14-16 July, 2010)

LANGUAGES

- **Spanish** (mother tongue)
- **Basque** (mother tongue): Certificate in Advanced Basque Language (C1) Official Language School (June 2014).
- **English**: Certificate in Advanced English (C1) Official Language School (May 2013)
- **Catalan** (intermediate level)