



Concept Note v2.3

Thank you for your interest in working with Rainforest Trust and the EDGE Alliance to help protect the most threatened tropical ecosystems. We invite you to send a completed concept note to info@edgeofexistence.org. The completed note should be not more than six pages long (excluding graphics) and accompanied by a shapefile or Google Earth file showing the proposed project area. Please visit the [EDGE of Existence website](http://edgeofexistence.org) to view the project selection criteria and view our [priority setting app](#) to see the areas of greatest priority. Lastly, please do not hesitate to contact us at info@edgeofexistence.org if you have any questions.

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|---|---|
| <p>Name of the lead organization that would implement the project:</p> <p>Cadi Ayyad University, Marrakech, Morocco</p> | <p>Name, title and email address of primary contact:</p> <p>Prof Mohammed Znari (PhD Ecology and Conservation Biology) Email: znarim@gmail.com / znari@uca.ac.ma</p> |
| <p>Lead organization website:</p> <p>Cadi Ayyad University, Marrakech, Morocco www.uca.ac.ma</p> | <p>Country where the proposed project would occur:</p> <p>Morocco</p> |
| <p>Is the lead organization nationally registered and authorized to work within the country of the proposed project?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> | <p>Type of proposal:</p> <p><input checked="" type="checkbox"/> Protected Area Full Award <input type="checkbox"/> Protected Area Rapid Feasibility Award</p> |
| <p>Please provide a name for the proposed area:</p> <p>N’Gounni Habitat/Species Management Area</p> | <p>Which of the following would the project seek to conserve? Please select all that apply:</p> <p><input checked="" type="checkbox"/> Critically Endangered, Endangered, or Vulnerable species (see question 5) – <i>(see the joined paper by Clavero et al. (2017))</i> <input type="checkbox"/> High Integrity Forest (see question 6)</p> |
| <p>What is the proposed IUCN category of the protected area?</p> <p>Category IV: Habitat or species management area</p> | |
| <p>Funding requested (in USD):</p> <p>250,000 USD</p> <p>If applicable, what is the cost of land to be purchased (in USD):</p> <p>100,000 USD (just an estimation for both PA) To be reconsidered if necessary.</p> | <p>Type of protection:</p> <p><input checked="" type="checkbox"/> Governmental Designation <input checked="" type="checkbox"/> Land Purchase or Long-term Lease <input type="checkbox"/> Other _____</p> |
| <p>If you have been in touch with Rainforest Trust staff about this project, please list their name(s): NA</p> | <p>Total size of the area(s) to be protected, in acres:</p> <p>3000 acres from the high mountain spring called N’Gounni at nearly 1.5 mile to downstream before the village Ait Attou). The other potential protected area is at the M’Goun valley</p> |

1. Please describe the primary goal of the proposed project in one sentence. Provide a list of the principal objectives and activities you would implement towards this. (200-word limit)

The primary goal of the project:

Saving the Dades trout, a relict and critically endangered African salmonid, from extinction



A Dades trout *Salmo multipunctatus* 11mm in length, from the Imigmar stream, M'Goun River basin (Figs 1 & 3c). © J. Esquivias. in Clavero et al. Oryx 2017.

Specific objectives:

- to restore the degraded/polluted stream-riparian habitats of the M'Goun headwaters, which should focus simultaneously on the riverbed on the whole drainage. Addressing erosion issues would require involving the local population in the recovery of the hill slope vegetation cover.
- to improve *in situ* resilience to climate change by concentrating efforts on the mitigation of temperature increases at the local scale, which would arguably be possible by enhancing the shading effects of riparian vegetation that favors the viability of trout populations by potentially preventing the surpassing of lethal/sublethal water temperature thresholds.
- to carry out educational programs and workshops to increase local awareness, enhance support for conservation, restore degraded stream-riparian habitats, establish sustainable resource management, and support local authorities in enforcing legal regulations.
- to establish one or two new protected areas (IUCN Category IV) to safeguard the spawning areas along the upstream habitats.
- Our long-term aim is to establish and implement a participatory management plan that engages all stakeholders in the conservation of the Dades trout and its natural habitats in both Dades and M'Goun valleys.

4. Describe the conservation importance and urgency of the proposed project. (200-word limit)

The Dades trout, the oldest African Salmonid, is restricted-range stream salmonid that is threatened by the loss of suitable habitats in its high-altitude environments. The genetic and biogeographical singularity of the species should make it a conservation urgency, but its survival, even in the short term, seems to be dependent on active specific and complementary management actions.

Options to conserve the Dades trout are available but could disappear if actions are not initiated in the near future. The small stream stretches that constitute the habitat of the Dades trout are affected by erosion. This drags sediments ending up in watercourses resulting in a decrease of the quality of potentially suitable habitat by increasing turbidity and substrate embeddedness. Overfishing by local people is also a threat to the species. Another high risk is trout stocking operations, but the remoteness of the Dades trout range would prevent such operations. However, this could change with the improvement of local transport infrastructures and increasing tourism.

Due to the increasing unsuitability and loss of permanent upstream aquatic environments, conservation action should involve adaptation measures to improve in situ resilience to climate change. Efforts should concentrate on the mitigation of temperature increases at the local scale.

7. What is the current ownership and management status of the land of the proposed project? (50-word limit)

The uncultivated lands through which the trout stream-riparian habitats flow are private or mostly a state property, managed by the Water and Forest Service and the provincials. Other lands are ancestral grazing commons managed collectively by different transhumant tribes on a regional scale; these pastoral areas are locally called 'Agdal'.

10. Are there any active or inactive extractive concessions (oil, gas, timber, mineral, etc) within the proposed protected area and if so, how will they impact protected area creation and management? (200-word limit)

Around the conservation area in question, there are several mineral deposits (copper, silver, gold, cobalt, etc.) being exploited, but they are relatively low-lying and far from the distribution areas of the two trout populations. So, there will be no impacts from such activities in the protected area to be created.

13. Please list up to five species that are globally threatened (IUCN Red List status of CR, EN, or VU) that occur in the proposed protected area and indicate if the project will protect >0.05% of the species' global population. Please refer to the [IUCN Red List](#) for nomenclature and threat status.

| Common Name | Scientific Name (<i>Genus species</i>) | Taxonomic Class | Conservation Status (CR, EN, or VU) | Project will protect >0.05% of species range (Y/N) | Notes |
|----------------------|--|------------------|-------------------------------------|--|---|
| Dadès trout | <i>Salmo multipunctatus</i> | Teleostei (Fish) | CR | Y | The Southernmost and oldest salmonid in Africa See Clavero et al. 2017 - Or 9 of 9 © 2017 Fauna & Flora Inte doi: 10.1017/S003060531600155 more information about the Dade its conservation status |
| Eurasian Otter | <i>Lutra lutra</i> | Mammalia | VU | Y | Destruction of aquatic and aquatic habitats and rarefa fishes |
| Atlas Barbary sheep | <i>Ammotragus lervia</i> | Mammalia | VU | Y | Poaching, illegal hunting, I destruction, domestic lives competition |
| Cuvier's Gazelle | <i>Gazella cuvieri</i> | Mammalia | VU | Y | EN and becoming rare in M habitat destruction and poa |
| The Egyptian vulture | <i>Neophron percnopterus</i> | Aves | EN | Y | Problem of empoisoning |

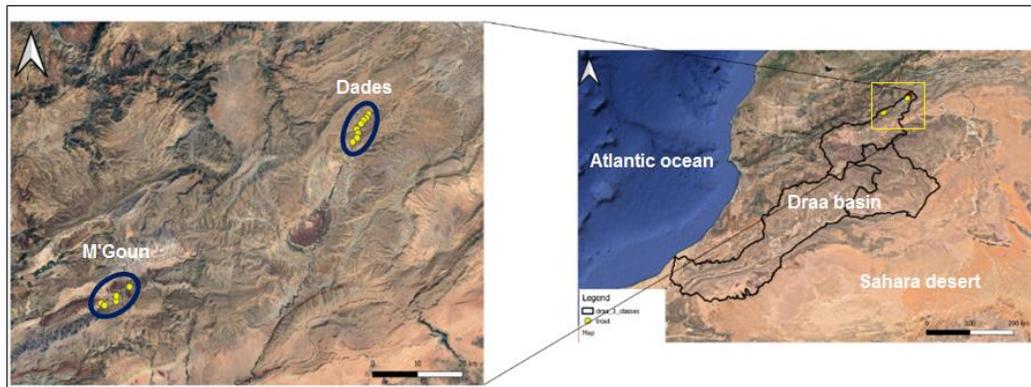
16. IF your site qualifies under the High Integrity Forest criteria listed [here](#), please provide detail on how the site represents this type of landscape. (200-word limit)

NA

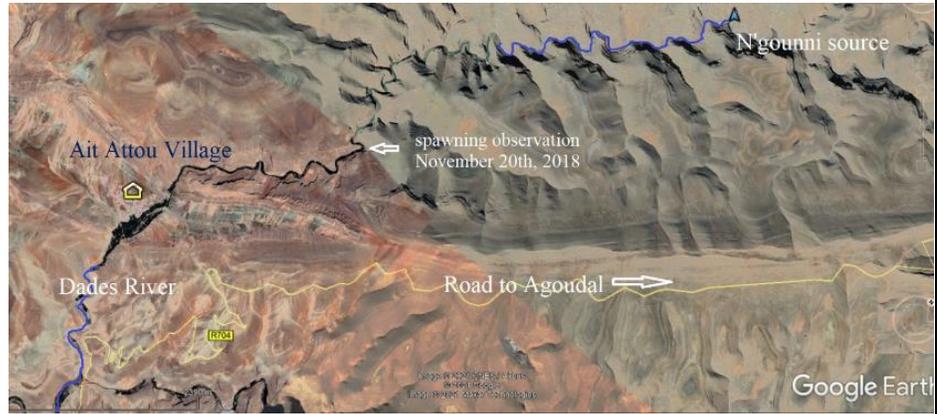
19. Please describe any experience the lead organization has in securing governmental designations, land purchases or long-term leases, or other forms of protection. Also, please detail whether the lead organization has experience working at the proposed project site. If none, please describe your proposed strategy and/or any confirmed partners and their experience in securing new protection. (100-word limit)

Within the framework of a German-Moroccan cooperation project (2019-2024) on the ecological and socioeconomic impacts of water salinization in the Draa river basin, southern Morocco, and a recent project funded by the Mohamed Bin Zayed Fund for Species Conservation (2023-2024), we have cosigned agreements with various partners (administrations and state organisations, regional NGOs) and organised workshops, the next will take place in October 2023. Among the partners that would be of great importance for the Dades trout project are the regional provinces and the National Agency for Water, Forests (ANEF) and its regional directorates concerned with the future protected area.

22. Please provide a simple map (pasted below or as an attached file), showing your proposed area and relevant contextual information (e.g., existing protected areas, planned future purchases, roads, etc.).



25. Please provide a shapefile (.shp, .dbf, .prj, and .shx) or Google Earth file (.kmz) (as an attached file) showing the boundary of the proposed protected area(s). Shapefiles or .kmz files should only include the proposed protected area(s) and no other features. If you send a shapefile, please send in the GCS WGS 1984 geographic coordinate system with Decimal Degree units.



Dades river with spawning area down-stream to N'Gounni spring (source)



M'Goun valley with Afalfal and Imigmar springs (sources) flowing the MGoun river (Occurrence of trouts)

28. Please provide contact information for three professional references who are familiar with your organization and your proposed project (full name, organization, job title, and email address).

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