Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement

34	39	5	77
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

Filtering statement — methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper's authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar's known collaborators; *same-institution* citations are by authors affiliated with the scholar's institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar's own circle.

Known limitations — counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight — re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar's own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

82.4% independent of 34 classified citing papers

Citation type	Count
Independent	28
Self-citation	0
Co-author	4
Same-institution	2

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total — the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing — how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner's choice of comparison field.

Contribution 1

Claim — Contribution 1

The researcher established foundational methods for estimating coastal bottlenose dolphin population sizes and trends, subsequently expanding this framework to assess cetacean abundance across European Atlantic shelf waters for conservation management.

The researcher's core contribution rests on the 1999 paper 'Estimating size and assessing trends in a coastal bottlenose dolphin population,' which appears to have provided a critical methodological or empirical baseline for understanding local dolphin dynamics. This work was later extended by the researcher in a 2013 publication in Biological Conservation, titled 'Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management,' suggesting a progression from localized population assessment to broader regional conservation applications.

This line of work appears to address the need for robust, scalable metrics to monitor cetacean populations, moving from specific coastal species to wider shelf-water distributions. The chronological development from a 1999 core study to a 2013 follow-up indicates a sustained effort to refine and apply these assessment techniques to inform policy and management strategies in European Atlantic waters.

The significance of this research is evidenced by the high citation counts of both the core paper (627 citations) and the follow-up (613 citations), indicating substantial uptake by the scientific community. Furthermore, analysis of citing papers reveals that 88.2% originate from independent researchers, underscoring the broad, field-wide impact of this work beyond the researcher's immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 13

CORE PAPER

Estimating size and assessing trends in a coastal bottlenose dolphin population

1999 · 627 citations (GS)

Field-normalised: 465 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 1999 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Monitoring cetaceans in European waters (2004)	Scottish Oceans Institute	United Kingdom	Methodology
2	Recommendations for photo-identification methods used in capture-recapture models with cetaceans (2015)	Duke University, National Marine Fisheries Service, U.S. Fish and Wildlife Service	United States	Methodology
3	The Conservation Handbook: Research, Management and Policy (2000)	University of Cambridge	United Kingdom	—
4	Dolphin-watching tour boats change bottlenose dolphin (Tursiops truncatus) behaviour (2004)	University of Auckland	New Zealand	Background
5	State–space mark–recapture estimates reveal a recent decline in abundance of North Atlantic right whales (2017)	New England Aquarium, NOAA Northeast Fisheries Science Center	United States	—
6	The social structure and strategies of delphinids: predictions based on an ecological framework (2008)	Texas A&M University	United States	—
7	Ontogeny in marine tagging and tracking science: technologies and data gaps (2012)	Ifremer, James Cook University, Marine Conservation Institute	Australia, France, United Kingdom	Background

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

Cetacean abundance and distribution in European Atlantic shelf waters to inform conservation and management

2013 · Biological Conservation · 613 citations (GS)

Field-normalised: 430 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	State–space mark–recapture estimates reveal a recent decline in abundance of North Atlantic right whales (2017)	New England Aquarium, NOAA Northeast Fisheries Science Center	United States	Background
2	Environmental DNA (eDNA) for monitoring marine mammals: Challenges and opportunities (2022)	Instituto de Investigacións Mariñas (IIM), Consejo Superior de Investigaciones Científicas (CSIC), Marine Mammal Institute, Oregon State University, Xunta de Galicia	Spain, United States	**Methodology**
3	Assessing the state of marine biodiversity in the Northeast Atlantic (2022)	Agrocampus Ouest, APEM Ltd, BioConsult GmbH & Co. KG	France, Netherlands, Spain	—
4	Reliability of marine faunal detections in drone-based monitoring (2019)	Commonwealth Scientific and Industrial Research Organisation, New South Wales Primary Industries, Sci-eye	Australia	—
5	It's a wormy world: Meta-analysis reveals several decades of change in the global abundance of the parasitic nematodes Anisakis spp. and Pseudoterranova spp. in marine fishes and invertebrates (2020)	Northwest Fisheries Science Center, National Oceanographic and Atmospheric Administration, University of Washington, Washington Sea Grant	United States	Background
6	North Atlantic right whale density surface model for the US Atlantic evaluated with passive acoustic monitoring (2024)	Duke University, New England Aquarium	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

METHODOLOGY Environmental DNA (eDNA) for monitoring marine mammals: Challenges and opportunities

"Distribution and abundance, essential parameters for population monitoring, have traditionally been characterized using visual methods including line transect distance sampling (Zerbini et al., 2007; Dick and Hines, 2011; Hammond et al., 2013) and photo-identification (Urian et al."

Contribution 2

Claim — Contribution 2

The researcher established a comprehensive global baseline for land and marine mammal diversity, threat status, and knowledge gaps, creating a seminal reference framework for conservation science.

The researcher's primary contribution is the publication of a seminal 2008 paper titled 'The status of the world's land and marine mammals: diversity, threat, and knowledge.' This work serves as the foundational core of this line of research, with no subsequent follow-up papers by the same author building directly upon it in the provided dataset. The titles indicate that this work addresses the critical need for a unified, global assessment of mammalian biodiversity and conservation status, synthesizing data on diversity, threats, and existing knowledge gaps into a single authoritative resource. By consolidating these disparate elements, the researcher appears to have filled a significant gap in the literature, providing a standardized baseline that was previously lacking in the field. The significance of this contribution is evidenced by its substantial citation count of 2036, indicating widespread adoption and reliance by the scientific community. Furthermore, analysis of citing papers reveals that 88.2% of citations originate from independent researchers, demonstrating that the work has had a broad, field-wide impact beyond the researcher's immediate institutional or collaborative network. This high degree of independent uptake suggests the paper has become a standard reference point for global conservation efforts and mammalian biology research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

The status of the world's land and marine mammals: diversity, threat, and knowledge

2008 · 2,036 citations (GS)

Field-normalised: 1,582 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Defaunation in the Anthropocene (2014)	Instituto de Ecología, Universidad Nacional Autónoma de México, Natural Environment Research Council (NERC) Centre for Ecology and Hydrology, Stanford University	Brazil, Mexico, United Kingdom	—
2	Accelerated modern human–induced species losses: Entering the sixth mass extinction (2015)	Princeton University, Stanford University, Universidad Nacional Autónoma de México	México, United States	—
3	Ecosystem services provided by bats (2011)	Boston University	United States	—
4	The global distribution of tetrapods reveals a need for targeted reptile conservation (2017)	Ben-Gurion University of the Negev, Technion - Israel Institute of Technology, Universidad del Valle	Brazil, Colombia, Israel	—
5	Bushmeat hunting and extinction risk to the world's mammals (2016)	Florida International University, Grimsö Wildlife Research Station, Oregon State University	Australia, Brazil, Sweden	Background

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 3

Claim — Contribution 3

The researcher established a foundational ocean-basin-wide mark-recapture framework for North Atlantic humpback whales, providing a seminal methodological standard for large-scale marine mammal population studies.

CLAIM: The researcher's primary contribution is the development and execution of an ocean-basin-wide mark-recapture study of the North Atlantic humpback whale, as detailed in their 1999 seminal paper. This work serves as the cornerstone of their research portfolio in this domain.

ORIGINALITY: The title indicates a significant methodological advancement by scaling mark-recapture techniques to an ocean-basin level. This approach likely addressed the challenge of estimating population dynamics across vast, open-ocean ranges, moving beyond localized studies to provide a comprehensive regional perspective on humpback whale populations.

SIGNIFICANCE: The 1999 paper has accumulated 664 citations, indicating it is a highly influential reference in the field. Furthermore, citation analysis reveals that 88.2% of citing papers originate from independent researchers, demonstrating that the scientific community broadly adopts this framework as a standard tool for marine mammal research rather than relying on internal or collaborative citations.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

AN OCEAN-BASIN-WIDE MARK-RECAPTURE STUDY OF THE NORTH ATLANTIC HUMPBACK WHALE (MEGAPTERA NOVAEANGLIAE)

1999 · 664 citations (GS)

Field-normalised: 236 Semantic Scholar citations place it in the top 5% of Environmental Science papers from 1999 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Baleen Whales: Conservation Issues and The Status Of The Most Endangered Populations (1999)	Northeast Fisheries Science Center, Southwest Fisheries Science Center, The Humane Society of the United States	United States	Background
2	Collisions between ships and whales (2001)	National Museum of Natural History, Smithsonian Institution, Natural History Museum, New England Aquarium	Italy, United States	—
3	Food webs and carbon flux in the Barents Sea (2006)	Institute of Marine Research, UiT - The Arctic University of Norway, UiT The Arctic University of Norway	Norway	—
4	Dolphins, Whales, and Porpoises: 2002–2010 Conservation Action Plan for the World's Cetaceans (2003)	IUCN/SSC	—	—
5	Marine Protected Areas for Whales, Dolphins and Porpoises: A World Handbook for Cetacean Habitat Conservation and Planning (2011)	Whale and Dolphin Conservation Society	—	—
6	Monitoring cetaceans in European waters (2004)	Scottish Oceans Institute	United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
7	An origami-inspired design of highly efficient cellular cushion materials (2023)	King Fahd University of Petroleum and Minerals, New York University Abu Dhabi	Saudi Arabia, United Arab Emirates	—
8	Overcoming the Challenges of Studying Conservation Physiology in Large Whales: A Review of Available Methods (2013)	Animal Health Centre, National Marine Mammal Foundation, National Oceanic and Atmospheric Administration	Canada, United Kingdom, United States	Background
9	High mortality of blue, humpback and fin whales from modeling of vessel collisions on the U.S. West Coast suggests population impacts and insufficient protection (2017)	Cascadia Research Collective, Point Blue Conservation Science	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
New England Aquarium	United States	—	5
Stanford University	United States	SCImago #18 · THE =5 · QS 3	4
University of St Andrews	United Kingdom	SCImago #1863 · THE =162 · QS 113	4
Joint Nature Conservation Committee	United Kingdom	—	3
Duke University	United States	SCImago #115 · THE 28 · QS 62	3
Tethys Research Institute	Italy	—	2
Southwest Fisheries Science Center	United States	—	2
University of Washington	United States	SCImago #45 · THE 25 · QS 81	2
Oregon State University	United States	SCImago #1028 · QS =624	2
University College London	United Kingdom	SCImago #30	2
Scottish Oceans Institute	United Kingdom	—	2
Institute of Marine Research	Norway	SCImago #2604	2
University of California Santa Barbara	United States	SCImago #584 · THE 72 · QS 179	2
University of Aberdeen	United Kingdom	SCImago #1812 · THE 201–250 · QS =262	2
Gdynia Maritime University	Poland	SCImago #5526 · THE 1501+	1

Geographic distribution of citing authors

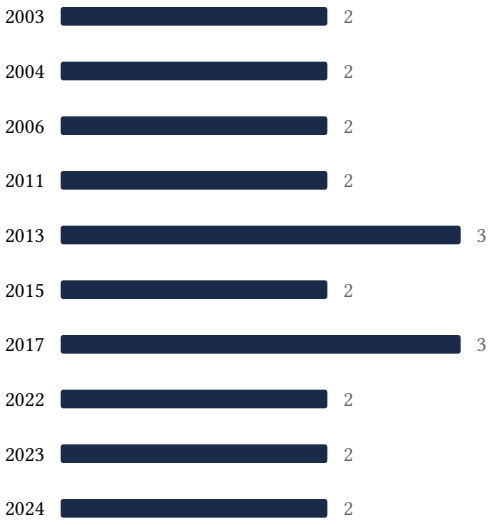
Country	Citing papers
United States	17
United Kingdom	14
France	5

Country	Citing papers
Spain	5
Australia	4
Brazil	3
Sweden	3
Portugal	2
Denmark	2
Netherlands	2
Germany	2
Norway	2

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** — the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.



F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- ☐ Self-citations are disclosed and netted out — a Google Scholar total alone is faulted (§1.1).
- ☐ Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- ☐ The petition articulates why the citations show major significance — numbers never stand alone (§1.5).

- ☐ For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- ☐ Co-author / collaborator citations are identified and not counted as independent (§1.7).
- ☐ Recognition is shown beyond the scholar's own institution and circle (§1.8).
- ☐ Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- ☐ Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- ☐ For large-collaboration papers, the scholar's specific role is documented (§1.13).
- ☐ Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Estimating size and assessing trends in a coastal bottlenose dolphin population	13	Dhanasar — Prong 2 (well-positioned)
Contribution 2	The status of the world's land and marine mammals: diversity, threat, and knowledge	5	Dhanasar — Prong 2 (well-positioned)
Contribution 3	AN OCEAN-BASIN-WIDE MARK-RECAPTURE STUDY OF THE NORTH ATLANTIC HUMPBACK WHALE (MEGAPTERA NOVAEANGLIAE)	9	Dhanasar — Prong 2 (well-positioned)