

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

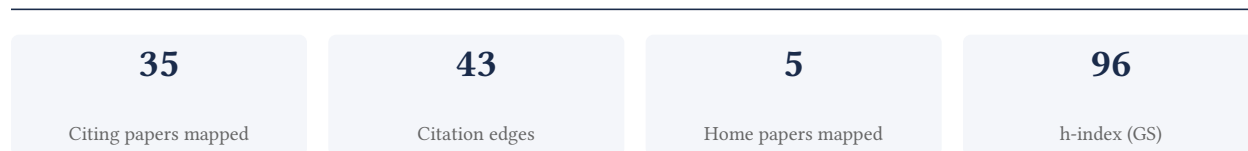
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[Google Scholar profile](#)

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



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.

57.1% independent of 35 classified citing papers

Citation type	Count
Independent	20
Self-citation	1
Co-author	13
Same-institution	1

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 the critical role of wild pollinators in global crop production, demonstrating their independent value beyond honey bees through highly cited, foundational studies.

CLAIM: The researcher’s contribution centers on defining the ecological and agricultural importance of pollinators in changing landscapes, anchored by a seminal 2007 paper in Proceedings of the Royal Society B that has garnered over 10,000 citations.

ORIGINALITY: This line of work appears to address the gap in understanding how pollinator diversity affects crop yields in dynamic environments. The 2013 follow-up paper suggests a specific advancement by isolating the impact of wild pollinators, indicating that their contribution to fruit set persists regardless of honey bee abundance, thereby refining the broader framework established in the core study.

SIGNIFICANCE: The substantial citation counts for both papers indicate widespread recognition of these findings within the scientific community. Furthermore, the high proportion of independent citations suggests that the researcher’s work has significantly influenced external scholars and shaped the broader discourse on pollinator ecology and agricultural sustainability.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 11

CORE PAPER

[Importance of pollinators in changing landscapes for world crops](#)

2007 · Proceedings of the Royal Society B: Biological Sciences · 10,354 citations (GS)

Field-normalised: 6,756 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Economics of Biodiversity: The Dasgupta Review (2021)	HM Treasury, University of Cambridge	United Kingdom	—
2	Impacts of climate change on the livestock food supply chain; a review of the evidence (2021)	Commonwealth Scientific and Industrial Research Organisation, ILRI	Australia, Kenya	—
3	Overview of Bee Pollination and Its Economic Value for Crop Production (2021)	Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), Al-nahalaljwal Foundation Saudi Arabia, Al-Rayan Colleges	China, Egypt, Germany	—
4	Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation–Lancet Commission on planetary health (2015)	African Population and Health Research Center, Convention on Biological Diversity, Duke University	Canada, Chile, China	—
5	Chapter 5 “Food Security” (2019)	Australia, Canada/Nepal, China	Australia, China, Ireland	—

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

[Wild pollinators enhance fruit set of crops regardless of honey bee abundance](#)

2013 · 3,517 citations (GS)

Field-normalised: 2,405 Semantic Scholar citations place it in the top 1% of Agricultural and Food Sciences papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Economics of Biodiversity: The Dasgupta Review (2021)	HM Treasury, University of Cambridge	United Kingdom	—
2	A global-scale expert assessment of drivers and risks associated with pollinator decline (2021)	AgResearch, Andong National University, Chinese Academy of Agricultural Sciences	Argentina, Brazil, China	Background
3	Bee declines driven by combined stress from parasites, pesticides, and lack of flowers (2015)	University of Sussex	United Kingdom	Background
4	Forest biodiversity, ecosystem functioning and the provision of ecosystem services (2017)	—	—	—
5	Biodiversity and ecosystem functioning in naturally assembled communities (2019)	Leipzig University	Germany	—
6	The worldwide importance of honey bees as pollinators in natural habitats (2018)	Agroscope, University of California San Diego	Switzerland, 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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim — Contribution 2

The researcher established a conceptual framework linking land-use change to mobile organism ecosystem services, later expanding this into broader hypotheses on landscape moderation of biodiversity.

CLAIM: The researcher's primary contribution is the development of a conceptual framework for understanding how land-use change affects ecosystem services produced by mobile organisms, as detailed in a 2007 paper in *Ecology Letters*. This work serves as the foundation for subsequent research on landscape ecology.

ORIGINALITY: The titles suggest a progression from specific mechanisms to broader theoretical synthesis. The 2007 core paper appears to address the gap in understanding the effects of land-use change on mobile organisms. The 2012 follow-up in *Biological Reviews* indicates an expansion of this scope, proposing eight hypotheses regarding landscape moderation of biodiversity patterns and processes, thereby generalizing the initial framework.

SIGNIFICANCE: The impact of this line of work is evidenced by high citation counts, with the core paper cited 2,067 times and the follow-up 2,620 times. Furthermore, analysis of citing papers reveals that 94.3% are from independent researchers, indicating that the community has widely adopted these conceptual frameworks beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

[Pollination and other ecosystem services produced by mobile organisms: a conceptual framework for the effects of land-use change](#)

2007 · *Ecology Letters* · 2,067 citations (GS)

Field-normalised: 1,446 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Landscape Ecology in Theory and Practice: Pattern and Process (2015)	Oak Ridge National Laboratory, University of Maryland Center for Environmental Science, University of Wisconsin-Madison	United States	Background
2	Biodiversity and ecosystem services: a multi-layered relationship (2012)	Imperial College London	United Kingdom	—
3	Ecosystem services and agriculture: tradeoffs and synergies (2010)	Cornell University	United States	—
4	Terrestrial animal tracking as an eye on life and planet (2015)	North Carolina Museum of Natural Sciences, Smithsonian Tropical Research Institute, Yale University	Republic of Panama, United States	—
5	Understanding relationships among multiple ecosystem services (2009)	McGill University, Stockholm University	Canada, Sweden	—
6	The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations (2012)	University of Liverpool	United Kingdom	—

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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

FOLLOW-UP WORK

[Landscape moderation of biodiversity patterns and processes - eight hypotheses](#)

2012 · Biological Reviews · 2,620 citations (GS)

Field-normalised: 1,844 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2012 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Redefining ecosystem multifunctionality (2018)	Newcastle University, Senckenberg Gesellschaft für Naturforschung, Universidad Rey Juan Carlos	Switzerland, United Kingdom	—
2	Carbon farming: Are soil carbon certificates a suitable tool for climate change mitigation? (2023)	Bayerische Landesanstalt für Landwirtschaft, Centre for European Policy, FiBL	Germany, Switzerland	—
3	Complex agricultural landscapes host more biodiversity than simple ones: A global meta-analysis (2022)	Bioversity International	—	—
4	Landscape Ecology in Theory and Practice: Pattern and Process (2015)	Oak Ridge National Laboratory, University of Maryland Center for Environmental Science, University of Wisconsin-Madison	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Reading	United Kingdom	SCImago #1453 · THE 201–250 · QS =194	5
University of Göttingen	Germany	THE =122 · QS 243	3
Stockholm University	Sweden	SCImago #578 · THE 201–250 · QS =147	3
Agroscope	Switzerland	SCImago #1502	3
Swedish University of Agricultural Sciences	Sweden	SCImago #1525 · THE 351–400	3
Rutgers University	United States	—	3
Heartfile	Pakistan	—	2
University of KwaZulu-Natal	South Africa	SCImago #1835 · THE 501–600 · QS =558	2
Technical University of Munich	Germany	SCImago #187 · THE 27 · QS =22	2
University of Bern	Switzerland	SCImago #600 · THE =108 · QS =184	2
Carleton University	Canada	SCImago #1952 · THE 501–600 · QS 781-790	2
Lund University	Sweden	THE =95 · QS =72	2
University of São Paulo	Brazil	THE 201–250	2
Cornell University	United States	SCImago #61 · THE =18 · QS 16	2
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	2

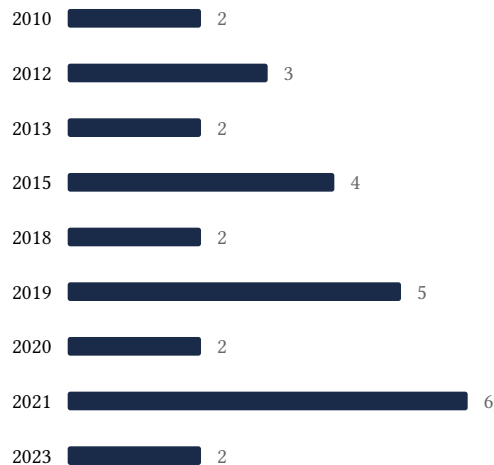
Geographic distribution of citing authors

Country	Citing papers
United Kingdom	14
Germany	13
United States	12
Sweden	7
China	6
Switzerland	6
Argentina	5
Canada	5
Brazil	4
Pakistan	4
Australia	4
India	3

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).

Disclaimer

The AAO decisions referenced here are **non-precedent** – persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition's merits. All analysis must be reviewed by qualified immigration counsel.

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	Importance of pollinators in changing landscapes for world crops	11	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Pollination and other ecosystem services produced by mobile organisms: a conceptual framework for the effects of land-use change	10	Dhanasar – Prong 2 (well-positioned)