

Supplemental Online Material**Table S1.** An extended list of major authors in the full database (1985–2017).

Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)
Abernethy, V.	7 (29)	Bonnes, M.	8 (365)	Clement, M.T.	17 (115)	Fearnside, P.M.	7 (238)
Absher, J.D.	7 (185)	Bowker, J.M.	10 (293)	Collins, T.W.	9 (146)	Fernandez-Gimenez, M.E.	7 (170)
Adams, A.E.	10 (55)	Brehm, J.M.	9 (235)	Conover, M.R.	7 (426)	Field, D.R.	9 (261)
Adeola, F.O.	11 (333)	Brenkert-Smith, H.	6 (163)	Cordell, H.K.	14 (765)	Finley, J.C.	18 (397)
Albrecht, S.L.	7 (139)	Bright, A.D.	15 (421)	Corral-Verdugo, V.	10 (377)	Fischer, A.	6 (73)
Alig, R.J.	6 (191)	Brown, G.	12 (604)	Cortner, H.J.	7 (63)	Fischer, A.P.	6 (112)
Alves, R.R.N.	6 (207)	Brown, P.	6 (132)	Curtis, A.	12 (504)	Flint, C.G.	16 (291)
Anderson, D.H.	12 (456)	Brown, T.L.	7 (236)	Daly, H.E.	6 (31)	Fly, J.M.	6 (184)
Arbuckle, J.G.	7 (137)	Brulle, R.J.	6 (165)	Daniels, S.E.	9 (435)	Fortmann, L.	8 (291)
Austin, K.F.	9 (53)	Brunson, M.W.	14 (499)	Davenport, M.A.	12 (312)	Foster, J.B.	10 (659)
Axinn, W.G.	9 (241)	Burger, J.	7 (164)	Davidson, D.J.	8 (1007)	Freudenburg, W.R.	33 (2073)
Bailey, C.	14 (201)	Burkett, P.	6 (121)	Davidson-Hunt, I.J.	6 (289)	Frickel, S.	10 (351)
Beckley, T.M.	15 (474)	Butler, B.J.	13 (507)	De Young, R.	8 (725)	Fulton, D.C.	8 (241)
Begossi, A.	10 (414)	Butler, D.L.	7 (149)	Decker, D.J.	21 (1074)	Gan, J.	6 (66)
Bekoff, M.	7 (23)	Buttel, F.H.	13 (635)	Devlin, A.S.	8 (264)	Geisler, C.C.	7 (90)
Bell, P.A.	9 (176)	Cable, S.	9 (152)	Dietz, T.	22 (5080)	Geller, E.S.	8 (179)
Belsky, J.M.	8 (285)	Carolan, M.S.	15 (445)	Downey, L.	17 (689)	Genskow, K.	7 (154)
Bengston, D.N.	9 (379)	Carr, D.L.	6 (274)	Dressler, W.H.	7 (247)	Ghimire, D.J.	6 (201)
Berkes, F.	18 (2433)	Carroll, M.S.	24 (635)	Dunlap, R.E.	21 (2758)	Giampietro, M.	7 (259)
Biedenweg, K.	8 (64)	Catton, W.R. Jr.	6 (62)	Dwyer, P.D.	6 (90)	Gifford, R.	9 (513)
Bilsborrow, R.E.	7 (288)	Cerveny, L.K.	8 (75)	Ebreo, A.	7 (766)	Giles-Corti, B.	8 (148)
Biner, P.M.	6 (131)	Cheng, A.S.	10 (391)	Edwards, K.J.	7 (153)	Gill, D.A.	11 (419)
Bliss, J.C.	14 (314)	Chess, C.	6 (110)	Elliott, J.R.	14 (555)	Gobster, P.H.	6 (64)
Bonaiuto, M.	7 (269)	Clark, B.	15 (578)	Evans, G.W.	18 (1680)	Godoy, R.A.	14 (335)

Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)
Gordon, J.S.	7 (61)	Hussain, A.	6 (90)	Kuo, F.E.	11 (2255)	McCabe, J.T.	7 (293)
Gramling, R.	16 (587)	Jakes, P.J.	11 (166)	Kyle, G.T.	6 (239)	McCool, S.F.	9 (379)
Grant, D.	8 (229)	Johnson, C.Y.	8 (302)	Larson, K.L.	9 (253)	McCright, A.M.	14 (1910)
Greenberg, M.R.	12 (220)	Johnson, R.L.	6 (180)	Laska, S.	8 (288)	McFarlane, B.L.	9 (406)
Grineski, S.E.	9 (105)	Jones, A.W.	6 (159)	Lauber, T.B.	14 (332)	McKinney, L.A.	10 (65)
Guagnano, G.A.	8 (2803)	Jones, R.E.	8 (647)	Leahy, J.E.	10 (128)	McLain, R.J.	7 (137)
Hall, T.E.	8 (96)	Jorgenson, A.K.	35 (1595)	Leistritz, F.L.	6 (55)	Mertig, A.G.	10 (292)
Hamilton, L.C.	21 (525)	Kaiser, F.G.	6 (442)	Leon, G.R.	9 (190)	Mertz, O.	9 (564)
Hammer, R.B.	6 (231)	Kalof, L.	7 (2375)	Leonard, W.R.	10 (239)	Metcalf, A.L.	7 (18)
Hammitt, W.E.	7 (145)	Kaplan, R.	8 (965)	Lilieholm, R.J.	6 (105)	Milner-Gulland, E.J.	8 (161)
Hanazaki, N.	6 (267)	Kaplan, S.	8 (893)	Liu, J.	14 (385)	Mix, T.L.	6 (76)
Hartig, T.	6 (1032)	Kearney, A.R.	6 (302)	London, B.	18 (349)	Mohai, P.	7 (474)
Heinimann, A.	7 (285)	Kellert, S.R.	6 (789)	Longo, S.B.	9 (73)	Mol, A.P.J.	7 (464)
Henderson, J.E.	6 (30)	Kilgore, M.A.	11 (320)	Loomis, J.B.	24 (521)	Moore, R.L.	8 (56)
Herzog, T.R.	18 (589)	Kim, Y.-S.	6 (348)	Luke, T.W.	8 (76)	Moritz, M.	7 (116)
Hill, K.	7 (408)	Kittredge, D.B.	11 (283)	Luloff, A.E.	40 (1182)	Morton, L.W.	8 (160)
Hoffman, A.J.	6 (539)	Knight, K.W.	7 (189)	Lynch, M.J.	9 (196)	Moseley, C.	6 (97)
Holmes, T.P.	7 (100)	Knuth, B.A.	22 (633)	Machlis, G.E.	8 (367)	Moser, G.	6 (139)
Hovardas, T.	8 (112)	Kocher, S.	6 (66)	Mahanty, S.	6 (206)	Munn, I.A.	10 (100)
Huanca, T.	6 (193)	Koontz, T.M.	7 (313)	Manfredo, M.J.	16 (652)	Murdock, S.H.	8 (58)
Hull, R.B.	10 (452)	Krannich, R.S.	29 (1063)	Manning, R.E.	10 (389)	Murray, G.	6 (111)
Humphrey, C.R.	6 (170)	Krausman, P.R.	10 (197)	Margerum, R.D.	7 (120)	Muth, R.M.	6 (120)
Hunter, L.M.	25 (940)	Kreuter, U.P.	16 (211)	Marquart-Pyatt, S.T.	7 (158)	Napier, T.L.	7 (84)
Huntsinger, L.	11 (292)	Krogman, N.T.	11 (176)	Marshall, B.K.	8 (314)	Nasar, J.L.	14 (836)

Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)
Nawrotzki, R.J.	7 (69)	Rosa, E.A.	13 (1116)	Steel, B.S.	6 (210)	Xiao, C.	13 (395)
Nelson, K.C.	7 (153)	Ross, H.	8 (375)	Steg, L.	11 (1678)	York, R.	32 (1803)
Nielsen-Pincus, M.	6 (43)	Roth, E.A.	6 (126)	Stern, M.J.	6 (171)	Young, R.A.	9 (152)
Næss, M.W.	6 (55)	Rotton, J.	7 (197)	Stern, P.C.	13 (4100)	Zimring, C.	10 (539)
Overdevest, C.	6 (171)	Rudel, T.K.	16 (471)	Stretesky, P.B.	15 (381)		
Padoch, C.	6 (304)	Safford, T.G.	6 (88)	Suedfeld, P.	9 (253)		
Parkins, J.R.	8 (301)	Salazar, D.J.	7 (39)	Sullivan, W.C.	14 (2334)		
Patterson, M.E.	6 (296)	Schelhas, J.	9 (233)	Syme, G.J.	8 (205)		
Paveglio, T.B.	11 (175)	Schultz, P.W.	11 (489)	Tarrant, M.A.	7 (310)		
Pellow, D.N.	6 (285)	Seekamp, E.	7 (77)	Theodori, G.L.	9 (345)		
Perz, S.G.	12 (354)	Seyfrit, C.L.	7 (92)	Tuler, S.	9 (602)		
Peterson, M.N.	12 (193)	Shandra, J.M.	20 (366)	Turner, M.D.	11 (417)		
Petrzelka, P.	8 (85)	Shelby, B.	7 (99)	Turner, N.J.	6 (489)		
Pfeffer, M.J.	6 (461)	Shindler, B.	8 (290)	Vadez, V.	7 (203)		
Picou, J.S.	10 (354)	Shriver, T.E.	20 (243)	Vasi, I.B.	6 (176)		
Pimentel, D.	13 (677)	Siemer, W.F.	7 (111)	Vaske, J.J.	19 (949)		
Prato, T.	9 (105)	Simpson, I.A.	8 (121)	Vining, J.	15 (1036)		
Prokopy, L.S.	16 (268)	Sivapalan, M.	7 (169)	Webler, T.	9 (578)		
Qin, H.	12 (89)	Smith, C.L.	7 (172)	Werner, C.M.	8 (300)		
Radeloff, V.C.	6 (255)	Smith, J.W.	11 (123)	White, D.D.	11 (209)		
Reyes-García, V.	18 (414)	Sommer, R.	8 (173)	Wilkie, D.S.	8 (240)		
Rice, J.	6 (183)	Staats, H.	6 (341)	Williams, D.R.	10 (398)		
Rickenbach, M.G.	6 (140)	Stamps, A.E.	14 (315)	Wolf, S.A.	6 (111)		
Riley, S.J.	8 (113)	Stedman, R.C.	29 (1470)	Wright, B.A.	7 (94)		

Notes: The list includes 268 authors with six or more articles in the full database. Authors are listed in alphabetical order.

Table S2. Major authors in the database (1985–2000).

Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)
Albrecht, D.E.	5 (29)	Fortmann, L.	8 (291)	Napier, T.L.	5 (65)
Albrecht, S.L.	7 (139)	Freudenburg, W.R.	16 (1436)	Nasar, J.L.	8 (703)
Bailey, C.	7 (168)	Geisler, C.C.	5 (86)	Pimentel, D.	8 (250)
Bartlett, A.A.	5 (94)	Geller, E.S.	6 (145)	Rotton, J.	5 (124)
Begossi, A.	7 (231)	Giampietro, M.	6 (230)	Rudel, T.K.	6 (310)
Bell, P.A.	5 (90)	Godoy, R.A.	7 (154)	Sadalla, E.K.	5 (218)
Biner, P.M.	6 (131)	Gramling, R.	10 (430)	Seyfrit, C.L.	6 (84)
Bliss, J.C.	6 (167)	Guagnano, G.A.	7 (2751)	Simcox, D.	5 (14)
Bright, A.D.	5 (163)	Hamilton, L.C.	9 (277)	Sommer, R.	7 (170)
Burnett, G.W.	5 (50)	Herzog, T.R.	5 (259)	Stern, P.C.	9 (3858)
Butler, D.L.	7 (149)	Hill, K.	6 (404)	Suedfeld, P.	8 (248)
Buttel, F.H.	6 (468)	Humphrey, C.R.	5 (163)	Syme, G.J.	6 (180)
Carroll, M.S.	5 (230)	Kaplan, R.	5 (293)	Vining, J.	9 (768)
Conover, M.R.	5 (424)	Kaplan, S.	6 (680)	Werner, C.M.	5 (175)
Cordell, H.K.	7 (298)	Kellert, S.R.	5 (766)	Young, R.A.	8 (116)
Cortner, H.J.	7 (63)	Knuth, B.A.	10 (322)	Zube, E.H.	5 (49)
Daly, H.E.	5 (22)	Krannich, R.S.	14 (612)		
De Young, R.	8 (725)	Leistritz, F.L.	5 (46)		
Decker, D.J.	5 (286)	Loomis, J.B.	14 (360)		
Dietz, T.	9 (3893)	Luloff, A.E.	12 (483)		
Dunlap, R.E.	7 (1097)	Machlis, G.E.	6 (352)		
Dwyer, P.D.	6 (90)	Manfredo, M.J.	10 (425)		
Ebreo, A.	6 (676)	Minnegal, M.	5 (82)		
Evans, G.W.	5 (845)	Murdock, S.H.	8 (58)		

Notes: The list includes 64 authors with five or more articles in the 1985–2000 subdatabase. Authors are listed in alphabetical order.

Table S3. Major authors in the database (2001–2017).

Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)	Author	No. of Articles (No. of Citations)
Adams, A.E.	10 (55)	Herzog, T.R.	13 (330)	Reyes-García, V.	18 (414)
Anderson, D.H.	10 (412)	Hunter, L.M.	23 (879)	Rosa, E.A.	11 (1027)
Beckley, T.M.	11 (342)	Jakes, P.J.	10 (163)	Rudel, T.K.	10 (161)
Berkes, F.	14 (1699)	Jorgenson, A.K.	35 (1595)	Shandra, J.M.	20 (366)
Bright, A.D.	10 (258)	Kilgore, M.A.	11 (320)	Shriver, T.E.	17 (186)
Brown, G.	10 (478)	Kittredge, D.B.	10 (242)	Stamps, A.E.	10 (229)
Brunson, M.W.	10 (323)	Knuth, B.A.	12 (311)	Stedman, R.C.	28 (1424)
Butler, B.J.	13 (507)	Krannich, R.S.	15 (451)	Steg, L.	10 (1557)
Carolan, M.S.	15 (445)	Kreuter, U.P.	15 (207)	Stretesky, P.B.	13 (231)
Carroll, M.S.	19 (405)	Krogman, N.T.	10 (146)	Sullivan, W.C.	10 (1427)
Clark, B.	15 (578)	Lauber, T.B.	11 (208)	Vaske, J.J.	15 (496)
Clement, M.T.	17 (115)	Leahy, J.E.	10 (128)	White, D.D.	10 (201)
Curtis, A.	10 (368)	Liu, J.	13 (337)	Xiao, C.	13 (395)
Davenport, M.A.	12 (312)	London, B.	15 (284)	York, R.	32 (1803)
Decker, D.J.	16 (788)	Loomis, J.B.	10 (161)		
Dietz, T.	13 (1187)	Luloff, A.E.	28 (699)		
Downey, L.	16 (602)	McCright, A.M.	13 (1562)		
Dunlap, R.E.	14 (1661)	McKinney, L.A.	10 (65)		
Elliott, J.R.	14 (555)	Munn, I.A.	10 (100)		
Evans, G.W.	13 (835)	Paveglio, T.B.	11 (175)		
Finley, J.C.	17 (382)	Perz, S.G.	11 (347)		
Flint, C.G.	16 (291)	Peterson, M.N.	12 (193)		
Freudenburg, W.R.	17 (637)	Prokopy, L.S.	16 (268)		
Hamilton, L.C.	12 (248)	Qin, H.	12 (89)		

Notes: The list includes 62 authors with 10 or more articles in the 2001–2017 subdatabase. Authors are listed in alphabetical order.

Table S4. Basic statistics of the 30 selected journals (1985–2000).

Journal	No. of Articles (No. of Citations)	Journal	No. of Articles (No. of Citations)
<i>Environment & Behavior</i>	545 (27449)	<i>Sociological Forum</i>	18 (882)
<i>Human Ecology</i>	344 (9105)	<i>Sociological Inquiry</i>	20 (469)
<i>Human Ecology Review</i>	56 (1785)	<i>Sociological Perspectives</i>	30 (615)
<i>Organization & Environment</i>	91 (1161)	<i>Sociological Quarterly</i>	16 (452)
<i>Population & Environment</i>	300 (3610)	<i>Sociological Spectrum</i>	35 (453)
<i>Society & Natural Resources</i>	447 (10781)	<i>Sociological Theory</i>	2 (95)
<i>American Journal of Sociology</i>	6 (671)	<i>Environmental Management</i>	99 (2533)
<i>American Sociological Review</i>	9 (1082)	<i>Forest Science</i>	40 (1427)
<i>Annual Review of Sociology</i>	4 (1226)	<i>Journal of Forestry</i>	63 (777)
<i>Critical Sociology</i>	5 (29)	<i>Journal of Soil & Water Conservation</i>	26 (267)
<i>Rural Sociology</i>	111 (5026)	<i>Journal of the American Water Resources Association</i>	57 (798)
<i>Social Forces</i>	11 (545)	<i>Journal of Wildlife Management</i>	1 (70)
<i>Social Problems</i>	11 (927)	<i>Rangeland Ecology & Management</i>	29 (467)
<i>Social Science Quarterly</i>	33 (1940)	<i>Water Resources Research</i>	57 (1558)
<i>Social Science Research</i>	5 (147)	<i>Wildlife Society Bulletin</i>	73 (2305)

Notes: Journals are listed in alphabetical order and by search phase. Title history of the journal *Rangeland Ecology & Management: Journal of Range Management* (1985–2004); *Rangeland Ecology & Management* (2005–present).

Table S5. Basic statistics of the 30 selected journals (2001–2017).

Journal	No. of Articles (No. of Citations)	Journal	No. of Articles (No. of Citations)
<i>Environment & Behavior</i>	704 (28165)	<i>Sociological Forum</i>	48 (792)
<i>Human Ecology</i>	854 (17343)	<i>Sociological Inquiry</i>	52 (1088)
<i>Human Ecology Review</i>	271 (3918)	<i>Sociological Perspectives</i>	25 (279)
<i>Organization & Environment</i>	250 (5905)	<i>Sociological Quarterly</i>	33 (1455)
<i>Population & Environment</i>	355 (7228)	<i>Sociological Spectrum</i>	49 (632)
<i>Society & Natural Resources</i>	1265 (24948)	<i>Sociological Theory</i>	14 (276)
<i>American Journal of Sociology</i>	16 (1292)	<i>Environmental Management</i>	400 (9973)
<i>American Sociological Review</i>	21 (1619)	<i>Forest Science</i>	61 (1307)
<i>Annual Review of Sociology</i>	9 (452)	<i>Journal of Forestry</i>	156 (2244)
<i>Critical Sociology</i>	38 (687)	<i>Journal of Soil & Water Conservation</i>	60 (535)
<i>Rural Sociology</i>	171 (4333)	<i>Journal of the American Water Resources Association</i>	59 (810)
<i>Social Forces</i>	46 (1573)	<i>Journal of Wildlife Management</i>	47 (794)
<i>Social Problems</i>	32 (1659)	<i>Rangeland Ecology & Management</i>	45 (616)
<i>Social Science Quarterly</i>	146 (5570)	<i>Water Resources Research</i>	114 (2926)
<i>Social Science Research</i>	51 (1631)	<i>Wildlife Society Bulletin</i>	91 (1575)

Notes: Journals are listed in alphabetical order and by search phase. Title history of the journal *Rangeland Ecology & Management: Journal of Range Management* (1985–2004); *Rangeland Ecology & Management* (2005–present).

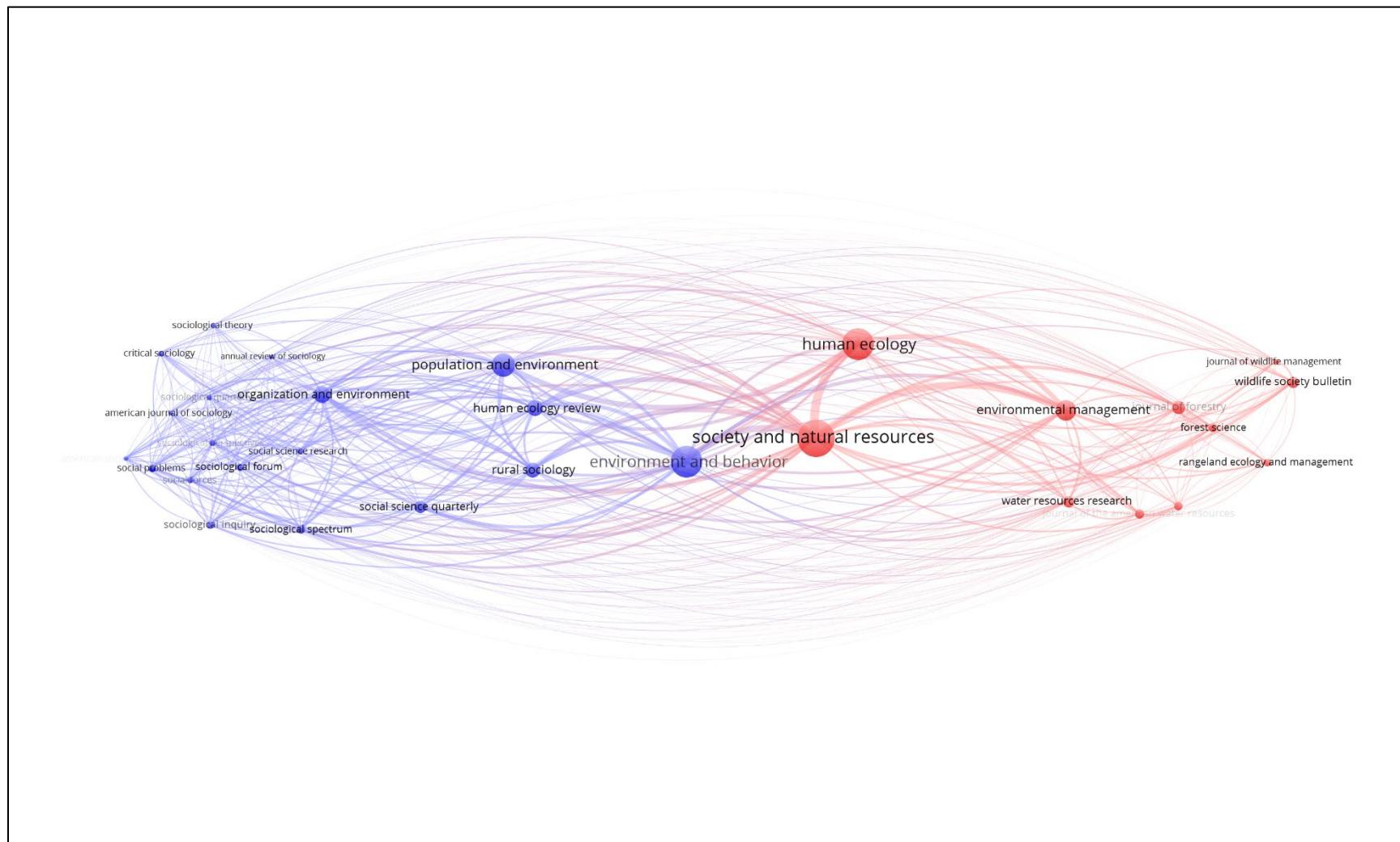


Figure S1. Journal bibliographic coupling networks (1985–2017). The figure includes all of the 30 journals in the full database. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of bibliographic coupling relations.

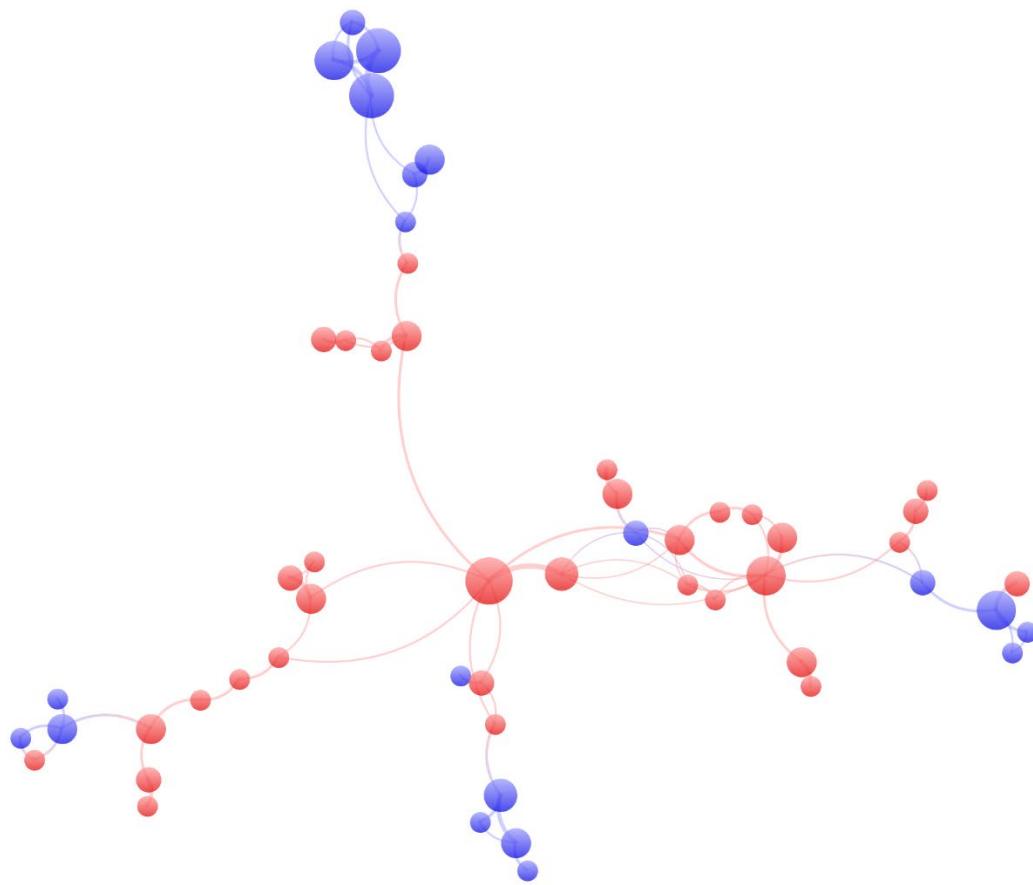


Figure S2. Scholar coauthorship networks (1985–2000). The figure includes 54 of the 617 authors with two or more article in the 1985–2000 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of coauthorship relations.

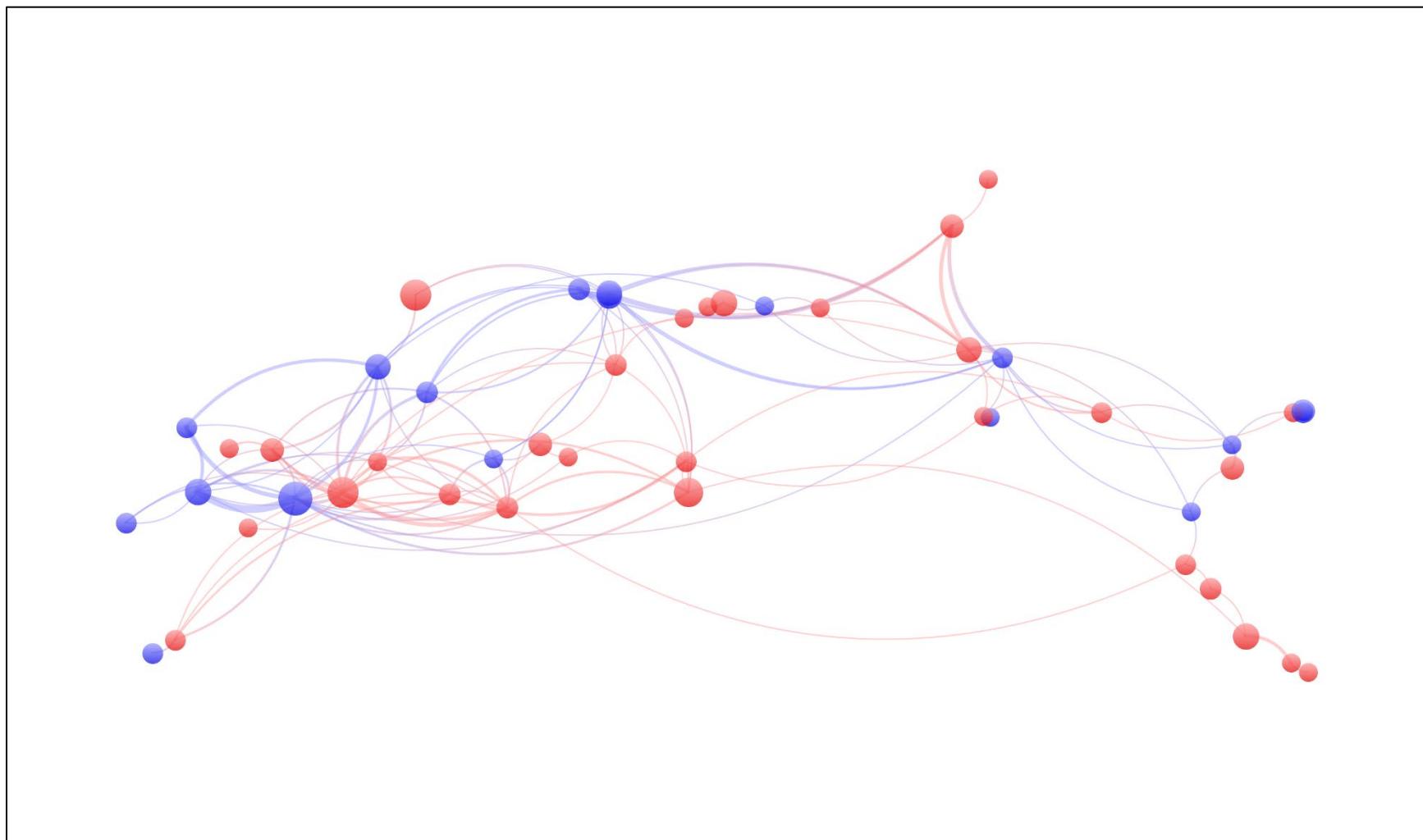


Figure S3. Scholar citation networks (1985–2000). The figure includes 48 of the 64 authors with five or more article 1985–2000 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of citation relations.

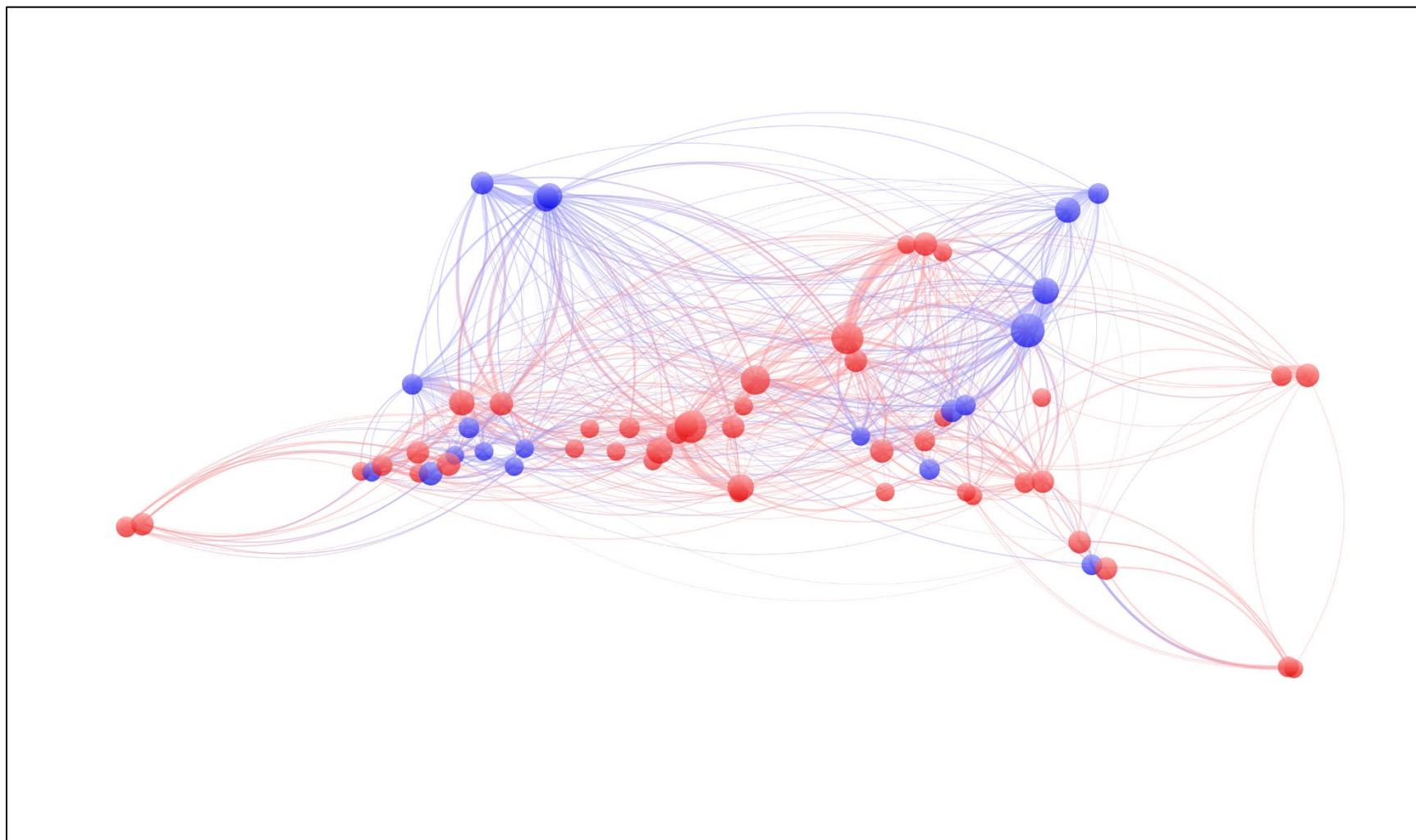


Figure S4. Scholar bibliographic coupling networks (1985–2000). The figure includes 63 of the 64 authors with five or more article in the 1985–2000 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of bibliographic coupling relations.

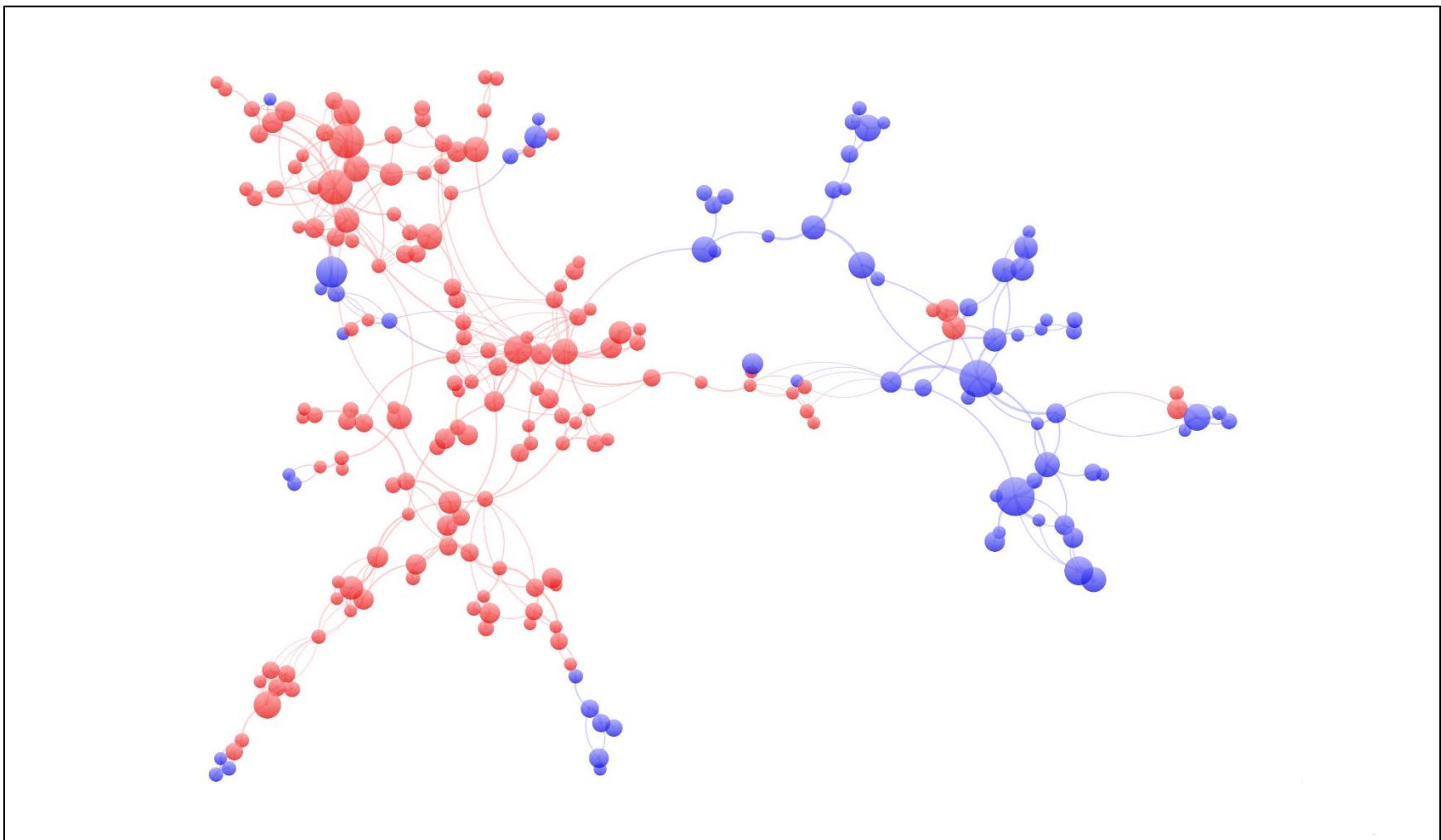


Figure S5. Scholar coauthorship networks (2001–2017). The figure includes 222 of the 395 authors with four or more article in the 2001–2017 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of coauthorship relations.

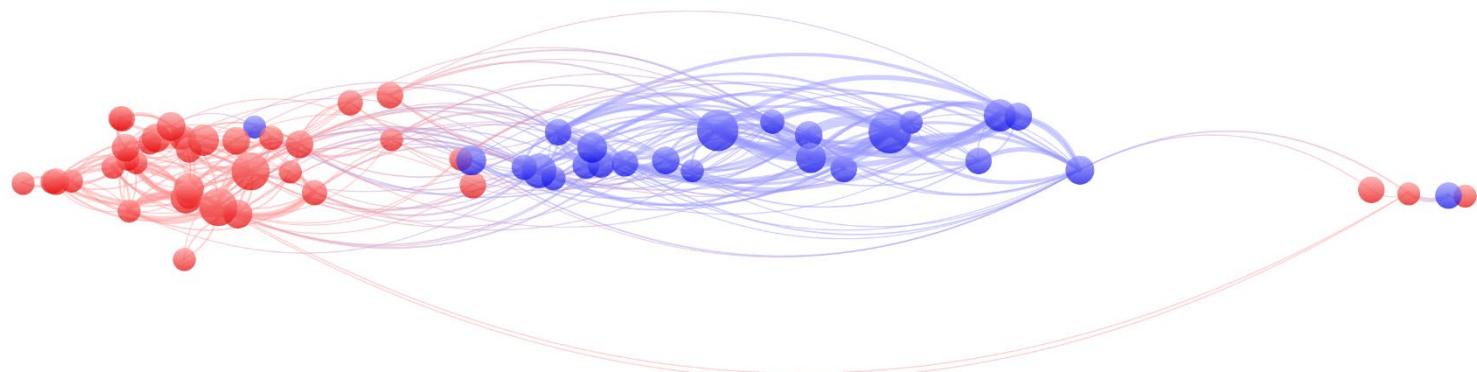


Figure S6. Scholar citation networks (2001–2017). The figure includes all of the 62 authors with 10 or more article in the 2001–2017 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of citation relations.

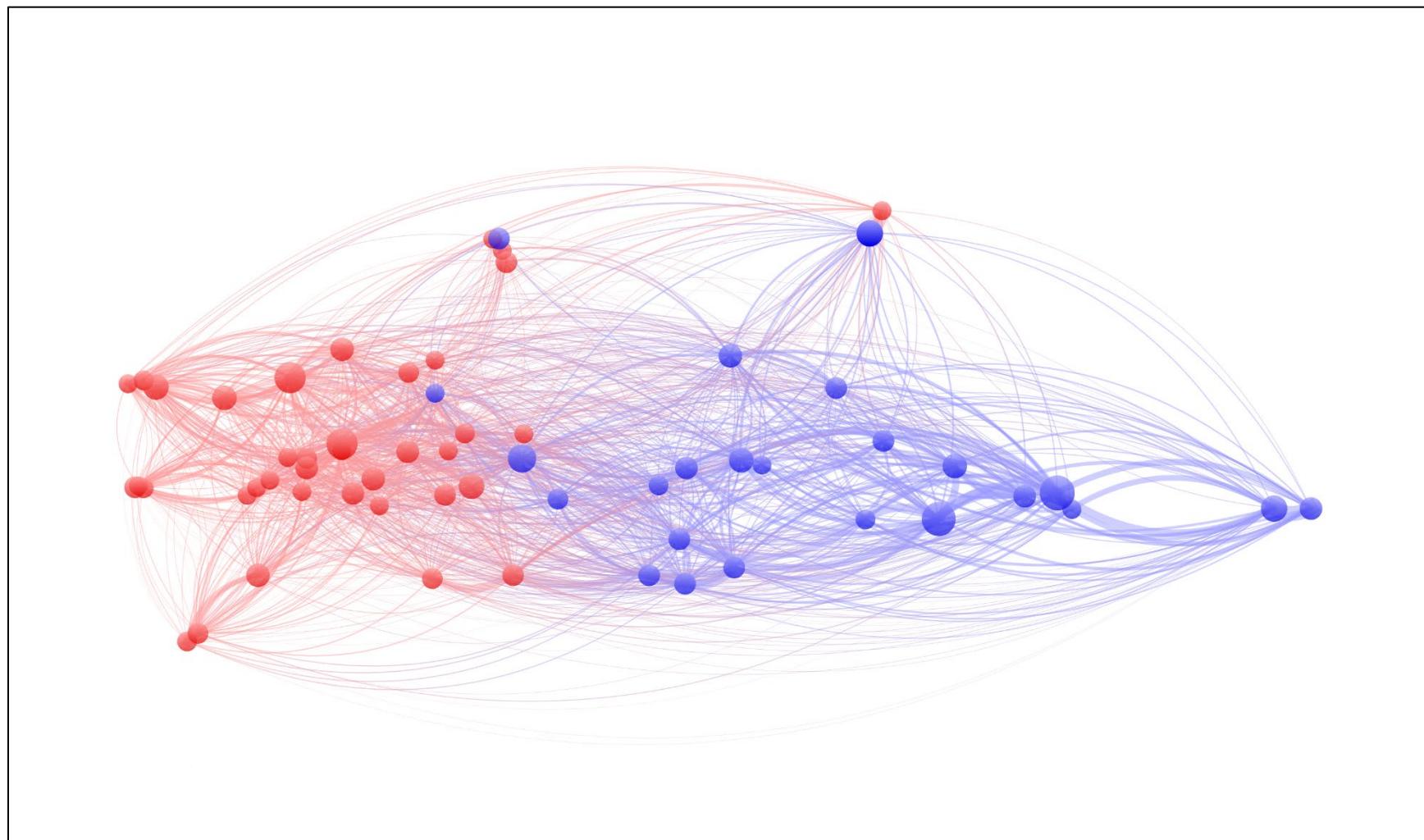


Figure S7. Scholar bibliographic coupling networks (2001–2017). The figure includes all of the 62 authors with 10 or more article in the 2001–2017 subdatabase: red circles = sociologists or social scientists in agricultural social science or natural resource departments and natural resource agencies; blue circles = liberal arts sociologists or social scientists (colors assigned manually by authors). The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of bibliographic coupling relations.

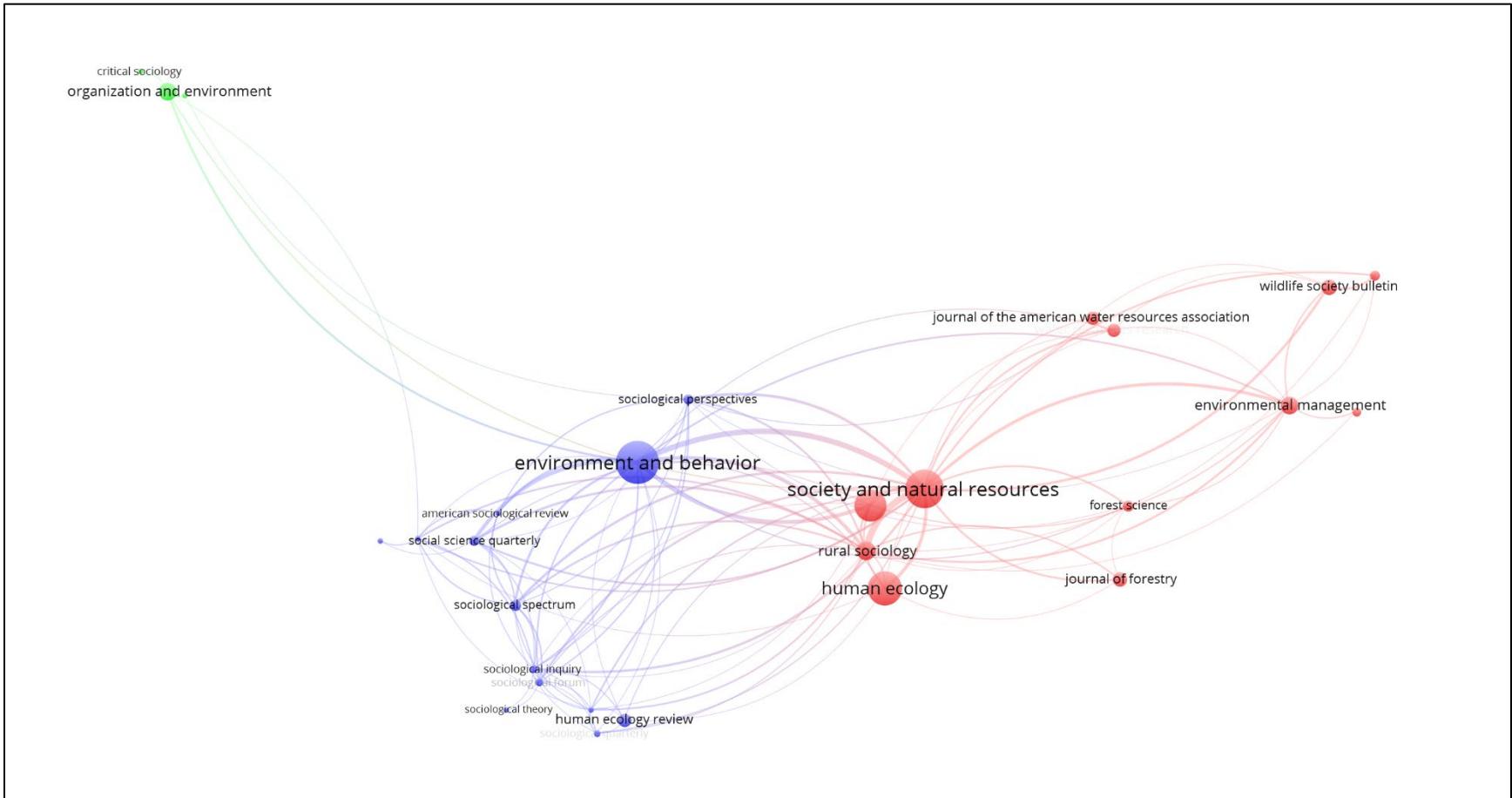


Figure S8. Journal citation networks (1985–2000). The figure includes 28 of the 30 journals in the 1985–2000 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of citation relations.

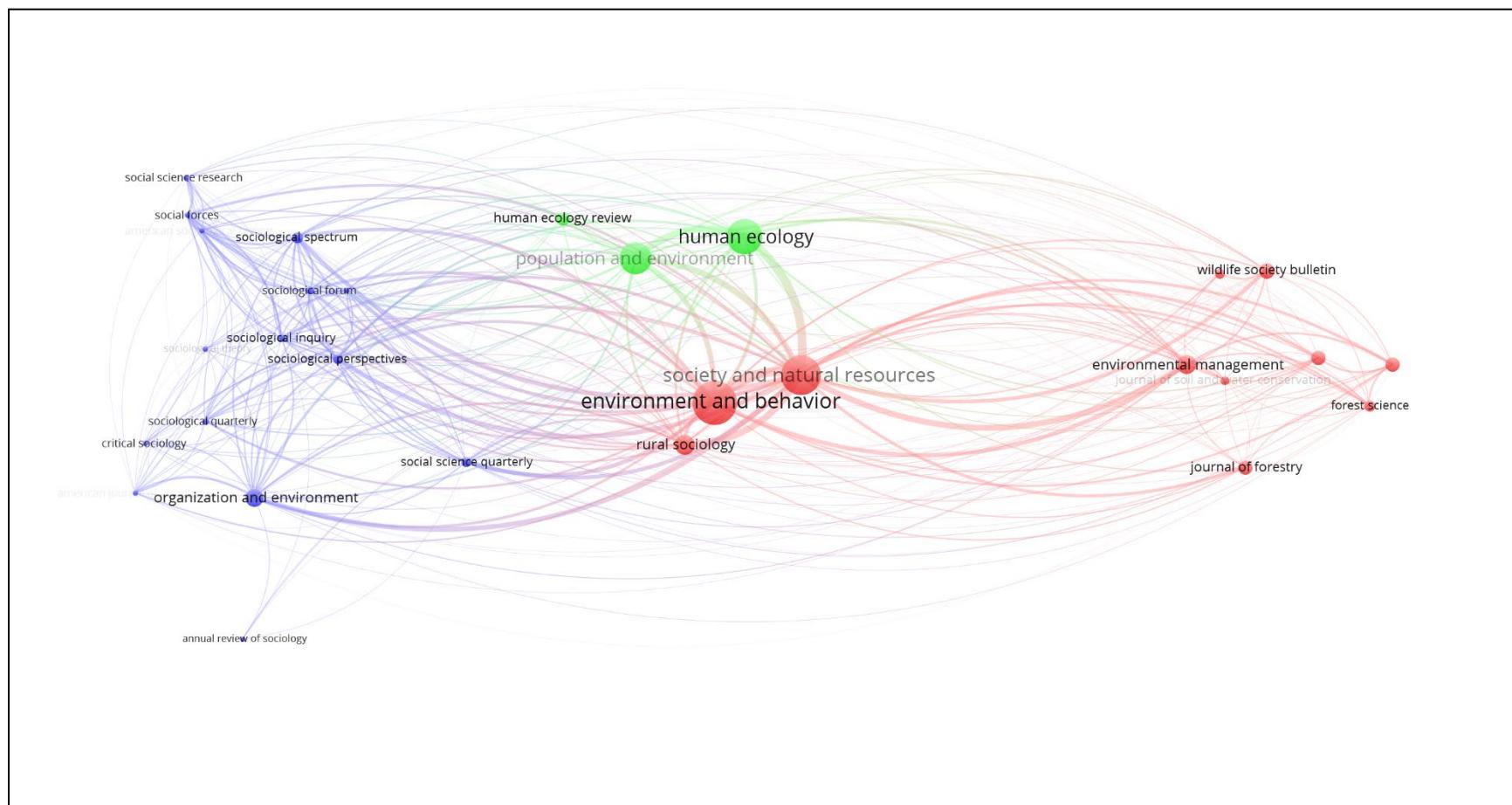


Figure S9. Journal bibliographic coupling networks (1985–2000). The figure includes 29 of the 30 journals in the 1985–2000 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of bibliographic coupling relations.

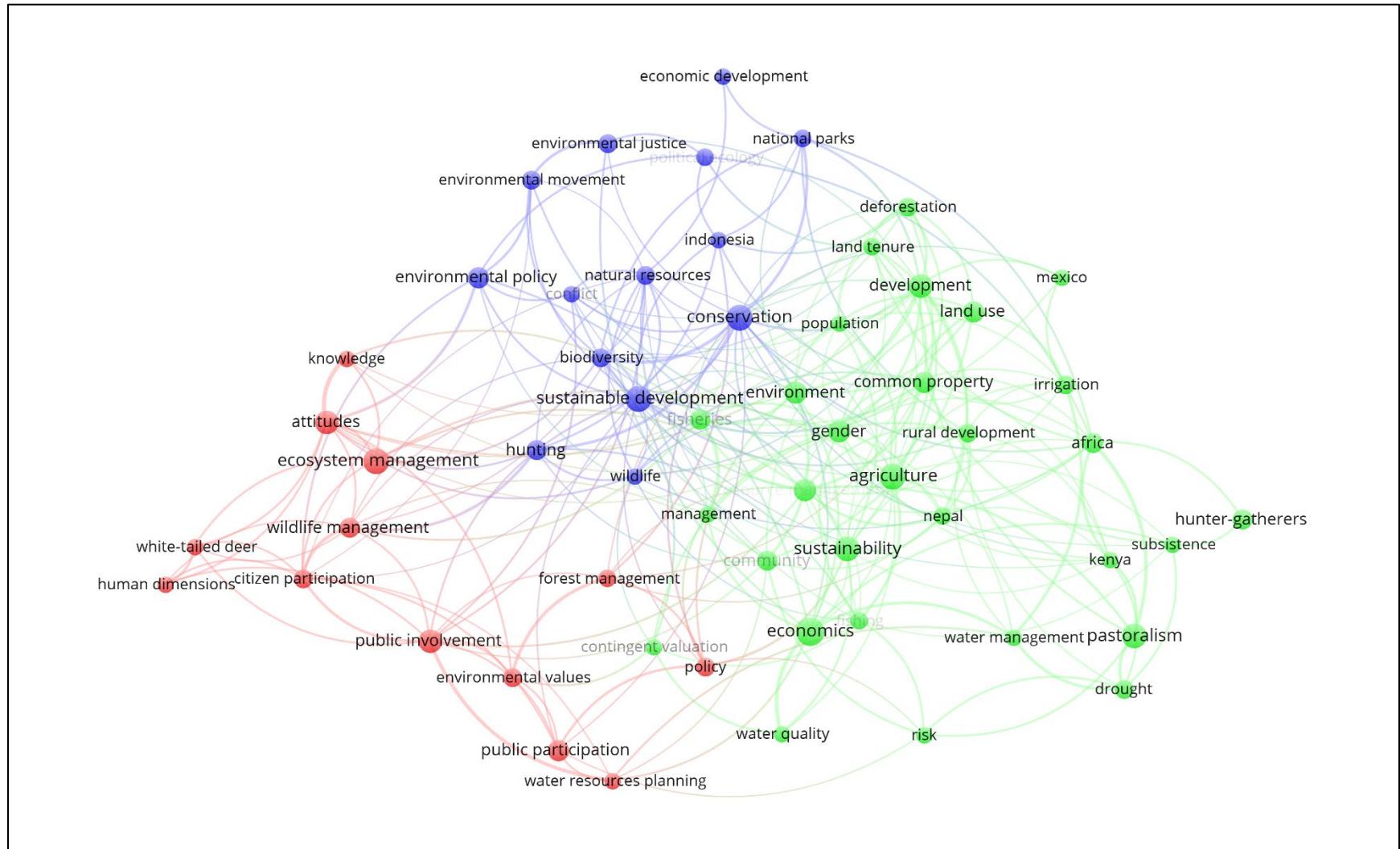


Figure S10. Author keyword co-occurrence networks (1985–2000). The figure includes 57 keywords with 10 or more occurrences in the 1985–2000 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of occurrences. The widths of lines denote the strength of co-occurrence relations.

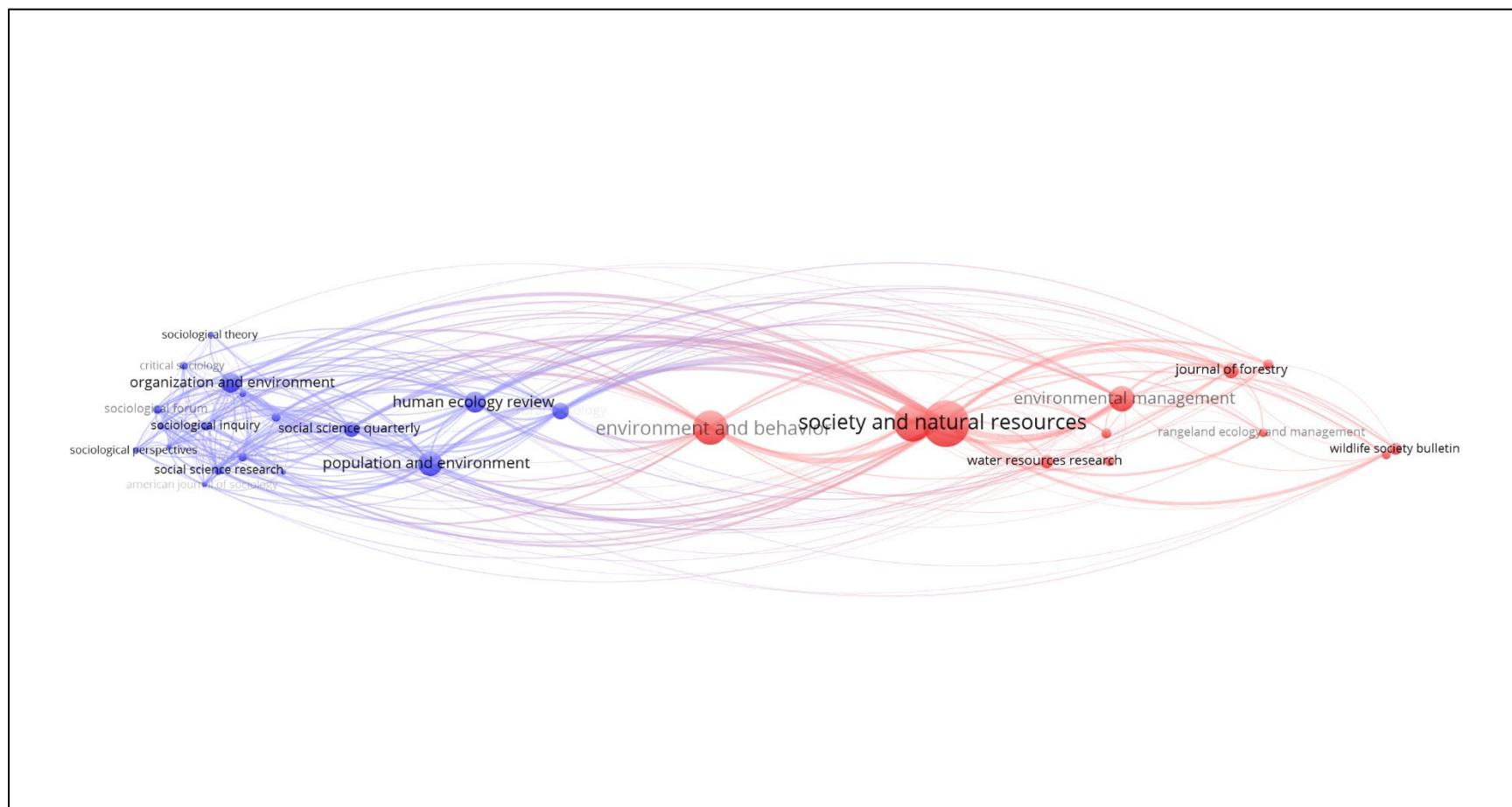


Figure S11. Journal citation networks (2001–2017). The figure includes all of the 30 journals in the 2001–2017 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of citation relations.

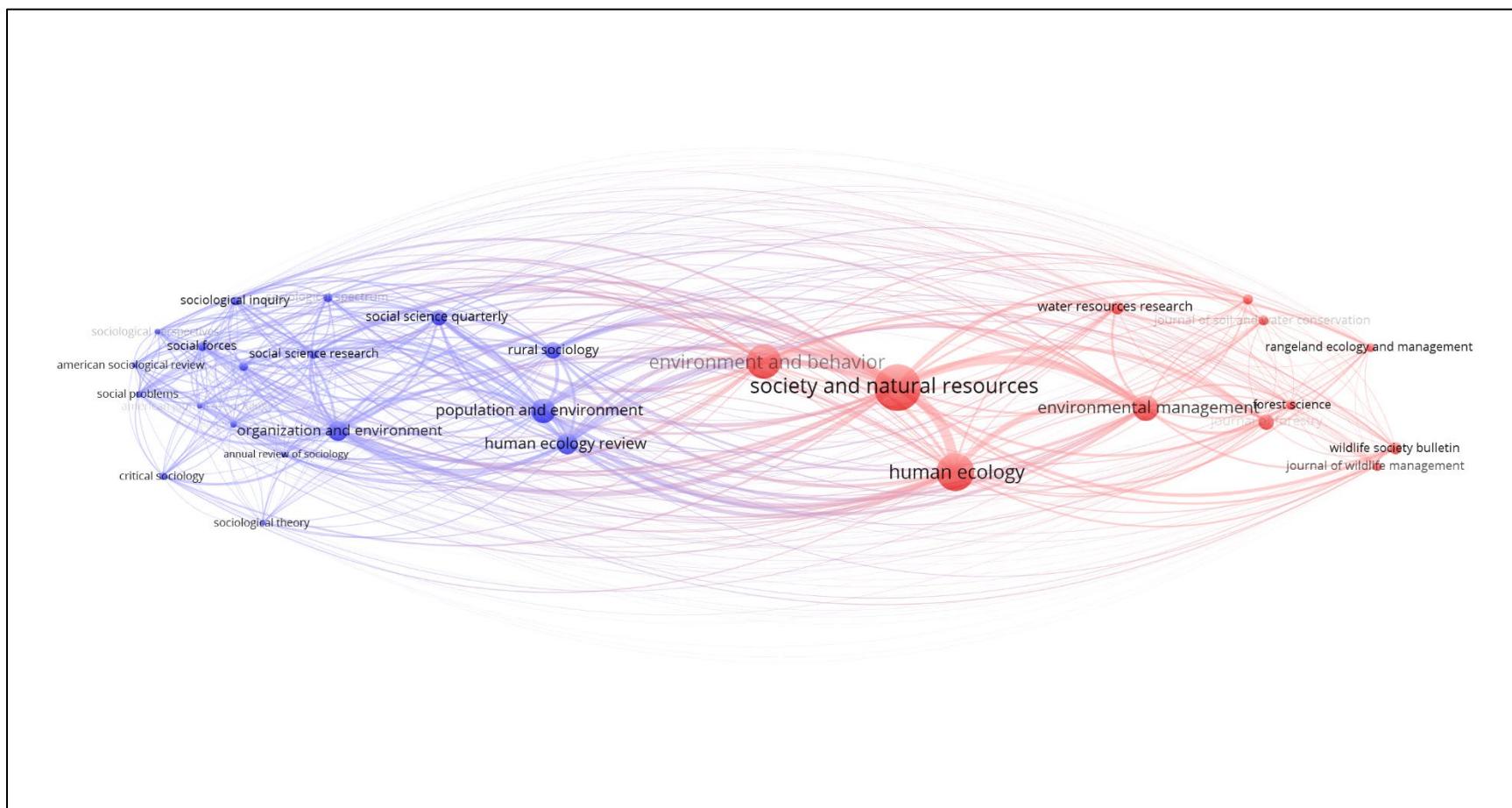


Figure S12. Journal bibliographic coupling networks (2001–2017). The figure includes all of the 30 journals in the 2001–2017 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of articles. The widths of lines denote the strength of bibliographic coupling relations.

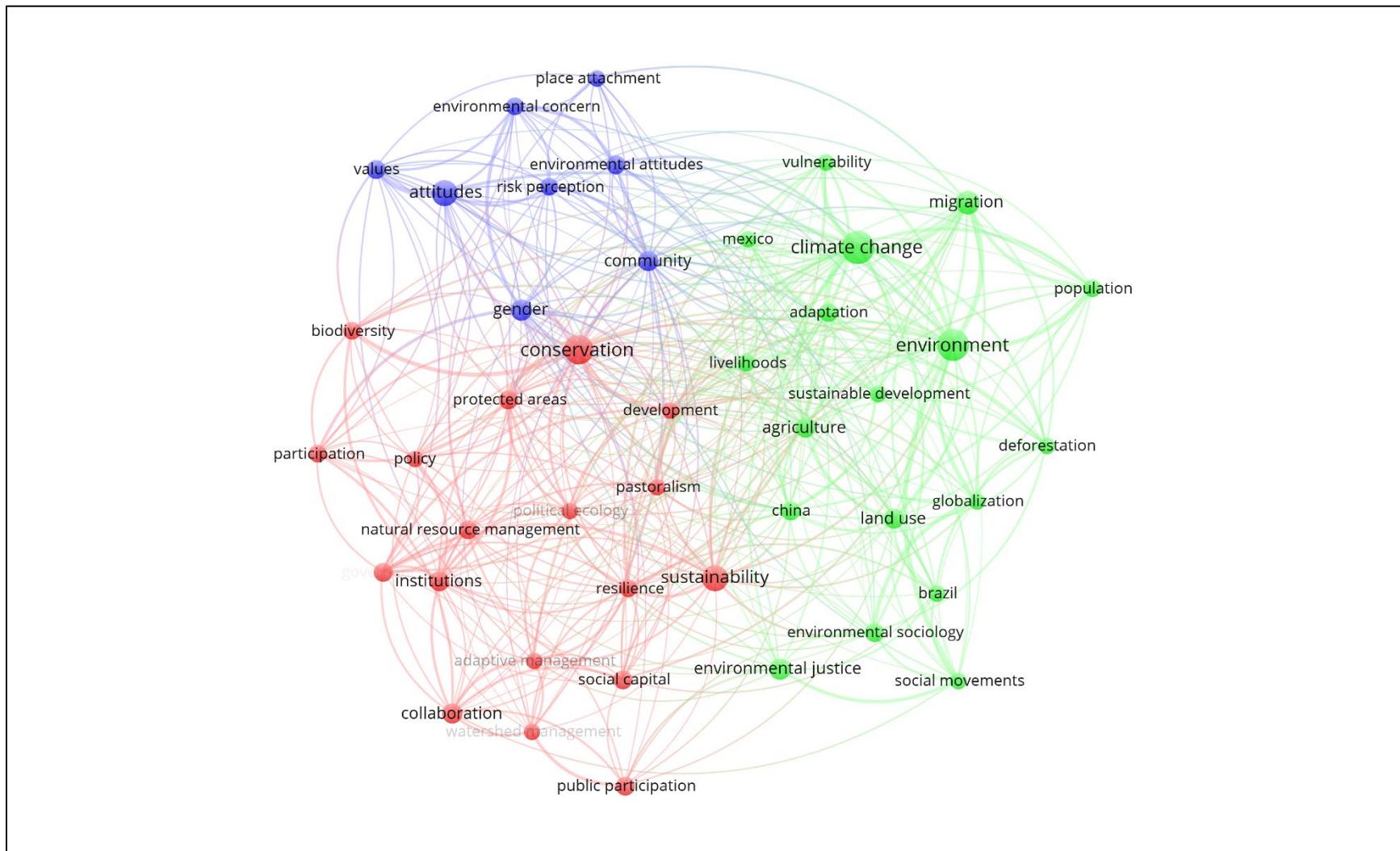


Figure S13. Author keyword co-occurrence networks (2001–2017). The figure includes 44 keywords with 40 or more occurrences in the 2001–2017 subdatabase. Colors stand for different clusters generated by VOSviewer. The sizes of circles are weighted by the number of occurrences. The widths of lines denote the strength of co-occurrence relations.