

*Journal of Biogeography***SUPPORTING INFORMATION****Contrasting spatio-temporal climatic niche dynamics during the eastern and western invasions of spotted knapweed in North America**

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Appendix S1 List of the herbaria and online databases used for collating the occurrences of spotted knapweed (*Centaurea stoebe*) in Europe and North America from 1831 to 2010.

Abbreviation	Name	Type	Location or URL
ARIZ	University of Arizona	Herbarium	Tucson, AZ, USA
ASU	Arizona State University	Herbarium	Tempe, AZ, USA
CDA	California Depart. of Food and Agriculture	Herbarium	Sacramento, CA, USA
COLO	University of Colorado Museum	Herbarium	Boulder, CO, USA
CONN	University of Connecticut	Herbarium	Storrs, CT, USA
FSU	Florida State University	Herbarium	Tallahassee, FL, USA
ID	University of Idaho	Herbarium	Moscow, ID, USA
KANU	University of Kansas	Herbarium	Lawrence, KS, USA
KSC	Kansas State University	Herbarium	Manhattan, KS, USA
MONT	Montana State University	Herbarium	Bozeman, MT, USA
MONTU	University of Montana	Herbarium	Missoula, MT, USA
NMSU	Northwest Missouri State University	Herbarium	Maryville, MO, USA
NY	New York Botanical Garden	Herbarium	Bronx, NY, USA
OSC	Oregon State University	Herbarium	Corvallis, OR, USA
RM	University of Wyoming	Herbarium	Laramie, WY, USA
SUU	Southern Utah University	Herbarium	Cedar City, UT, USA
UAM	University of Arkansas at Monticello	Herbarium	Monticello, AR, USA
UC	University of California	Herbarium	Berkeley, CA, USA
UNA	University of Alabama	Herbarium	Tuscaloosa, AL, USA
UNLV	University of Nevada, Las Vegas	Herbarium	Las Vegas, NV, USA
UNM	University of New Mexico	Herbarium	Albuquerque, NM, USA
UT	University of Utah	Herbarium	Salt Lake City, UT, USA
UVSC	Utah Valley University	Herbarium	Orem, UT, USA
WDNE	BLM, Winnemucca District	Herbarium	Winnemucca, NV, USA
WIS	University of Wisconsin	Herbarium	Madison, WI, USA
WS	Washington State University	Herbarium	Pullman, WA, USA
WTU	University of Washington	Herbarium	Seattle, WA, USA
CAN	Canadian Museum of Nature	Herbarium	Ottawa, ON, Canada
UBC	University of British Columbia	Herbarium	Vancouver, BC, Canada
BRA	Slovak National Museum	Herbarium	Bratislava, Slovakia
CL	Babes-Bolyai University	Herbarium	Cluj-Napoca, Romania
LE	V. L. Komarov Botanical Institute	Herbarium	Saint-Petersburg, Russia
SAV	Institute of Botany, Slovak Academy of Sciences	Herbarium	Bratislava, Slovakia

E-flora BC	Electronic atlas of the flora of British Columbia	Online database	http://www.geog.ubc.ca/biodiversity/eflora/
IPANE	Invasive plant atlas of New England	Online database	http://www.eddmaps.org/ipane/
INVADERS	Invaders database system (NW)	Online database	http://invader.dbs.umt.edu/
CCH	Consortium of California Herbaria	Online database	http://ucjeps.berkeley.edu/consortium/
CalFlora	CalFlora database on wild California plants	Online database	http://www.calflora.org/
USDA-APHIS	USDA animal and plant health inspection service	Online database	http://www.aphis.usda.gov/
NMBCC	New Mexico Biodiversity Collections Consortium	Online database	http://nmbiodiversity.org/

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Appendix S2 Eigenvectors (loadings) of the principal components analysis (PCA). The direction and length of the arrows illustrate the contribution of the climatic factors to the first two axes of the PCA. The first and second axes broadly represent a temperature gradient and a humidity gradient, respectively. Abbreviations: *aet/pet*, ratio of actual and potential evapotranspiration; *gdd*, number of growing degree-days above 5 °C; *p*, annual precipitation; *pet*, potential evapotranspiration; *ppi*, number of months with drought; *stdp*, seasonality of precipitation; *t*, annual mean temperature; *t_{max}*, annual maximum temperature; *t_{min}*, annual minimum temperature.

