

**Fall 2018 - 60735 - PA 388K – Advanced Topics in Public Policy**  
**Environmental Change, Development, and Security**

**Busby, Joshua W.**

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Tues: 9 – Noon, SRH 3.216/3.219

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Can environmental problems lead to security problems? Answers to this question require an understanding of what constitutes security. Security for whom? States? Individuals? This course will primarily review two waves of scholarship on environmental security, the first from the 1990s in which scholars assessed the connections between environmental problems and conflict, and the second from the 2000s on the connections between climate change and security. In the process, the course will review different conceptions of security, from narrow conceptions that focus on environmental change and conflict onset to broader understandings of human security.

Along the way, other side discussions of environmental security will be explored in a limited way including (1) transboundary rivers and security, (2) environmental peacemaking and (3) the effects of war on the environment. Other contemporary issues including the wildlife poaching crisis and land grabs will also come up in a cursory way.

The class will also be an opportunity to preview chapters from my draft book manuscript on climate and security including the theoretical chapters as well as several case studies on Somalia/Ethiopia, Syria/Lebanon/Jordan, and Myanmar/Bangladesh/India. We will read the draft chapters and background readings on those cases.

**Requirements and Expectations**

Course assignments will include a final paper, a grounding exercise related the readings to some news articles, two short writing assignments and a policy memo.

**Readings**

Readings will be articles and chapters on electronic reserve, roughly 100-150 pages per week.

## **COURSE REQUIREMENTS**

- Writing Assignments (30%)
- Grounding Exercise (15%)
- Final Paper (40%)
- Policy Memo (15%)

**Writing Assignments (30%):** You need to write two 2-page response papers to the readings over the course of the semester for two different weeks. Your responses should be double-spaced. You should address all of the authors you read for that week. What is their argument? Do you agree with their assessment? Why or why not? This assignment will force you to be pithy. The best papers will provide a synthesis of some of the key points made in the readings, your own critical evaluation of and reactions to the readings, and comments on the conceptual implications of the readings. Do NOT sequentially summarize each of the readings. Response papers are due the beginning of the class for the topic on that given day.

**Grounding Exercise (15%):** Take one of the topics you are not writing about for reading summaries and volunteer to do a grounding exercise. Each week, I will select some news article(s) that I think are relevant to the topic of the week, and we will spend the first thirty minutes of the class relating the news story to the week's readings. You will lead that discussion. In addition, I'd like a one page double-spaced paper relating the news story to the readings for the week. You should hand that paper to me after you present.

**Final Paper (40%):** Take an environmental issue that you care about that you think has generated security consequences (disasters, protests, violence). Assess what those are, the nature of the relationship, the strength of the information, and several options to address the problem. You might choose paired cases of two cases both affected by environmental change but only one with negative security consequences. More detailed instructions about the essay will be handed out, but it will count for 45% of your grade and be roughly 15 pages in length (12-pt font, double-spaced) excluding the bibliography and graphics.

**Policy Memo (15%):** You will write a two-page single-spaced memo summarizing the problem of your final paper and identifying three options to do something about it.

*\* Late assignments will be penalized by 1/3 of a letter grade for every day late. Thus, an A- would become a B+, a B+ a B, etc.*

*A grade 95-*

*A- grade 90-94*

*B grade 85-87*

*B+ grade 88-89*

*B- grade 80-84*

*C+ grade 78-79*

*C grade 75-77*

→ Keep in mind LBJ School policies on academic integrity. Duly cite and quote your sources in any written material.

## Course Digest

1	September 4	What is the environment? What is security?
2	September 11	Environmental Security – First Generation
3	September 18	First Generation Critiques
4	September 25	Environmental Impact of War/New Dimensions in Environmental Security
5	October 2	Climate and Security – The Policy Debate
6	October 9	Climate and Security – The Academic Debate
7	October 16	Disasters
8	October 23	Food & Economic Growth
9	October 30	Water
10	November 6	Migration
11	November 13	Busby Book Workshop – Introductory Chapters 1 & 2 & 3
12	November 20	Busby Book Chapter 4: Somalia and Ethiopia
13	November 27	Busby Book Chapter 5: Syria and Lebanon/Jordan
14	December 4	Busby Book Chapter 6: Myanmar and Bangladesh/India, <b>DRAFT</b>
	December 14	<b>Final Paper and Memo Due</b>

### Week 1 (September 4) - What is the environment? What is security?

Johnson, D. L., S. H. Ambrose, T. J. Bassett, M. L. Bowman, and et al. "Meanings of Environmental Terms." 1997. *Journal of Environmental Quality*; Madison 26, no. 3: 581-589.

Walt, Stephen M. 1991. "The Renaissance of Security Studies," *International Studies Quarterly* 35, no. 2 (1991): 211-39.

Ullman, Richard. 1983. "Redefining Security." *International Security* 8, no. 1: 129-53.

Barnett, J., Matthew, R.A., O'Brien, K.L., 2010. Global Environmental Change and Human Security: An Introduction, in: Matthew, R.A., Barnett, J., McDonald, B., O'Brien, K.L. (Eds.), *Global Environmental Change and Human Security*. MIT Press, Cambridge, 3-32.

Paris, Roland. 2001. "Human Security: Paradigm Shift or Hot Air?" *International Security* 26, no. 2: 87-102.

### Week 2 (September 11) - Environmental Security – First Generation

Malthus, Thomas. 1798. "An Essay on the Principle of Population." Chapters 1-2, 1-11.

Kaplan, Robert, 1994. The Coming Anarchy. *Atl. Mon.* 273, 44-76.

Homer-Dixon, Thomas F. 1991. "On the Threshold: Environmental Changes as Causes of Acute Conflict." *International Security* 16, no. 2 (1991): 76-116.

Homer-Dixon, Thomas F. 1994. "Environmental Scarcities and Violent Conflict: Evidence from Cases." *International Security* 19, no. 1: 5-40.

Conca, Ken and Geoffrey D. Dabelko. 2002 *Environmental Peacemaking* (Washington, D.C. Baltimore: Woodrow Wilson Center Press ; Johns Hopkins University Press)., 1-23, 220-234.

### **Week 3 (September 18) - First Generation Critiques**

Deudney, D., 1990. The Case Against Linking Environmental Degradation and National Security. *Millennium* 19, 461–476.

Levy, M.A., 1995. Is the Environment a National Security Issue? *Int. Secur.* 20, 35–62.

Homer-Dixon, T.F., Levy, M.A., 1995. Environment and Security. *Int. Secur.* 20, 189–198.

Gleditsch, N.P., 1998. Armed Conflict and the Environment: A Critique of the Literature. *J. Peace Res.* 35, 381–400.

Kahl, C.H., 2006. *States, scarcity, and civil strife in the developing world*. Princeton University Press, Princeton. 1-64.

### **Week 4 (September 25) – Environmental Impact of War/New Dimensions in Environmental Security**

Reuveny, Rafael, Andreea S. Mihalache-O’Keef, and Quan Li. 2010. “The Effect of Warfare on the Environment.” *Journal of Peace Research* 47 (6): 749–61.

Hanson, Thor, Thomas M. Brooks, Gustavo a. B. Da Fonseca, Michael Hoffmann, John F. Lamoreux, Gary Machlis, Cristina G. Mittermeier, Russell A. Mittermeier, and John D. Pilgrim. 2009. “Warfare in Biodiversity Hotspots.” *Conservation Biology* 23 (3): 578–87.

Lawrence, M. et al. 2015. The effects of modern war and military activities on biodiversity and the environment. *Environ. Rev.* 23: 443–460.

Butsic, Van, Matthias Baumann, Anja Shortland, Sarah Walker, and Tobias Kuemmerle. 2015. “Conservation and Conflict in the Democratic Republic of Congo: The Impacts of Warfare, Mining, and Protected Areas on Deforestation.” *Biological Conservation* 191 (November): 266–73.

Beyers, Rene L. et al. 2011. Resource Wars and Conflict Ivory: The Impact of Civil Conflict on Elephants in the Democratic Republic of Congo - The Case of the Okapi Reserve. *PLoS One*. 1-12.

DNI. 2013. Wildlife Poaching Threatens Economic, Security Priorities in Africa. 1-7.

Stiles, Daniel. 2014. Ivory Trade, Terrorism And U.S. National Security: How Connected Are They?. Unpublished paper. 1-25.

Haenlein, Cathy and M L R Smith. 2016. "Poaching, Wildlife Trafficking and Security in Africa: Myths and Realities." *Whitehall Papers*. Introduction and Conclusion. 1-21 & 102-109.

### **Week 5 (October 2) Climate and Security – The Policy Debate**

CNA Corporation, 2007. National Security and the Threat of Climate Change, 5-18. SKIM the Voices of Experience profiles.

Busby, J., 2007. Climate Change and National Security: An Agenda for Action. Council on Foreign Relations. 1-27.

National Research Council, 2008. Climate and Social Stress. 1-14.

National Intelligence Council, 2008. National Intelligence Assessment, Climate and Security. 1-20.

Adelphi and Woodrow Wilson Center. 2015. *A New Climate for Peace*. Executive Summary. Vii-xix.

Center for Climate and Security. 2015. Climate Security 101. 1-7.

Dabelko, G.D., Risi, L.H., Null, S., Parker, M., Sticklor, R., 2013. *Backdraft: The Conflict Potential of Climate Change Adaptation and Mitigation*. Wilson Center. 3-12.

USAID 2015. Climate Change and Conflict. IX-XII, 14-32.

### **Week 6 (October 9) – Climate and conflict – The Academic Debate**

Gleditsch, N.P., 2012. Whither the weather? Climate change and conflict. *J. Peace Res.* 49, 3–9.

Meierding, Emily, 2013. "Climate Change and Conflict: Avoiding Small Talk about the Weather," *International Studies Review* 15, no. 2 (June 1, 2013): 185–203.

Hendrix, C., Gates, S., Buhaug, H., 2016. Environment and Conflict, in: Mason, T.D., Mitchell, S.M. (Eds.), *What Do We Know about Civil Wars?* Rowman & Littlefield Publishers, Lanham, Maryland, 231–246.

Theisen, Ole Magnus. 2017. Climate change and violence: lessons from political science. *Current Climate Change Reports*. 210-221.

Busby, Joshua. 2018. Environmental Security. In *Handbook of International Security*, edited by William C. Wohlforth and Alexandra Ghenciu. Oxford University Press. 1-15.

Adger, W.N., Pulhin, J.M., Barnett, J., Dabelko, G.D., Oswald Spring, U., Vogel, C.H., 2014. 2014: Human security, in: Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (Eds.), *Climate Change 2014:*

Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK and New York, NY, USA, 758-761 & 771-778.

### **Week 7- (October 16) - Climate & Disasters**

Wheeler, David. 2012. Mapping the Impacts of Climate Change. Center for Global Development. <https://www.cgdev.org/page/mapping-impacts-climate-change>

United Nations. 2015. “Global Assessment Report on Disaster Risk Reduction.” 3-23.

Sen, Amartya. 2000. *Development as Freedom*. First Anchor Books, pp. 160-188.

Kelman, Ilan. 2006 “Island Security and Disaster Diplomacy in the Context of Climate Change.” *Les Cahiers de La Sécurité* 63: 61–94.

Smith, Alistair and Alejandro Quiroz Flores. 2010. “Disaster Politics.” *Foreign Affairs*. 1-3.

Slettebak, R.T., 2012. Don’t Blame the Weather! Climate-Related Natural Disasters and Civil Conflict. *Journal of Peace Research*. 49, 163–176.

Egorova, Aleksandra and Cullen Hendrix. 2014. “Can Natural Disasters Precipitate Peace?” CCAPS. 1-8.

### **Week 8 – (October 23) – Climate & Food/Economic Growth**

Office of the Director of National Intelligence, 2015. Global Food Security. 1-20.

Iglesias, Ana, Sonia Quiroga, and Agustin Diz. 2011. “Looking into the Future of Agriculture in a Changing Climate.” *European Review of Agricultural Economics* 38, no. 3: 427–47.

von Uexkull, Nina, Mihai Croicu, Hanne Fjelde, and Halvard Buhaug. 2016. Civil conflict sensitivity to growing-season drought. *Proceedings of the National Academy of Sciences*: 201607542. 1-6.

Koubi, Vally, 2017. Climate Change, the Economy, and Conflict. *Current Climate Change Reports*. 200-209.

Lagi, Marco Karla Z. Bertrand and Yaneer Bar-Yam. 2011. “The Food Crises and Political Instability in North Africa and the Middle East.” New England Complex Systems Institute. 1-11.

Smith, T.G., 2013. “Food Price Spikes and Social Unrest in Africa.” CCAPS. 1-12.

Hendrix, Cullen. 2015. “In Food Riots, Researchers Find a Divide Between Democracies and Autocracies.”

## **Week 9 – (October 30) – Climate & Water**

Office of the Director of National Intelligence, 2012. Global Water Security. 1-20.

USAID. 2014. Water and Conflict Toolkit. 1-41.

Stefano, L.D., Duncan, J., Dinar, S., Stahl, K., Strzepek, K.M., Wolf, A.T., 2012. Climate change and the institutional resilience of international river basins. *J. Peace Res.* 49, 193–209.

World Bank. 2016. “High and Dry: Climate Change, Water, and the Economy.” 1-9, 40-47.

Busby, J., 2017. “Water and Security.” Council on Foreign Relations. 1-19.

Sternberg, T. 2017. “Water Towers: Security Risks in a Changing Climate Troy Sternberg” 20-27.

## **Week 10 – (November 6) – Climate & Migration**

Reuveny, R., 2007. Climate change-induced migration and violent conflict. *Polit. Geogr.* 26, 656–673.

Raleigh, C., Jordan, L., Salehyan, I., 2008. Assessing the Impact of Climate Change on Migration and Conflict. *Soc. Dimens. Clim. Change.* 1-40.

Werz, Michael and Laura Conley. 2012. “Climate Change, Migration, and Conflict. Addressing complex crisis scenarios in the 21st Century.” Center for American Progress. 1-38.

Adger, W.N., Pulhin, J.M., Barnett, J., Dabelko, G.D., Oswald Spring, U., Vogel, C.H., 2014. 2014: Human security, in: Field, C.B., Barros, V.R., Dokken, D.J., Mach, K.J., Mastrandrea, M.D., Bilir, T.E., Chatterjee, M., Ebi, K.L., Estrada, Y.O., Genova, R.C., Girma, B., Kissel, E.S., Levy, A.N., MacCracken, S., Mastrandrea, P.R., White, L.L. (Eds.), *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge, UK and New York, NY, USA, 766-771.

McLeman, Robert. 2017. “Migration and Displacement in a Changing Climate.” Center for Climate and Security. 100-106.

McLeman, Robert and Francois Gemenne. 2018 “Environmental migration research: evolution and current state of the science.” *Routledge Handbook of Environmental Migration.* 3-13.

Douglass, Collin. 2017 Sea Level Rise, Deterritorialized States and Migration: The Need for a New Framework. Center for Climate and Security. 1-4.

## **Week 11 (November 13) – Busby Book Chapters 1, 2, and 3**

## **Week 12 (November 20) – Somalia and Ethiopia**

Busby chapter.

Carr, Ed. 2011 Drought does not equal famine. Open the Echo Chamber blog.

Alex de Waal. Mass Starvation: *The History and Future of Famine*. Selected pages. 17.

Gill, Peter. 2010. *Famine and Foreigners: Ethiopia Since Live Aid*. Oxford. Selected pages.

Maxwell, Daniel and Nisar Majid. 2016. *Famine in Somalia*. Oxford. Selected pages.

### **Week 13 (November 27) – Syria and Lebanon/Jordan**

Busby chapter.

Gleick, P.H., 2014. Water, Drought, Climate Change, and Conflict in Syria. *Weather Clim. Soc.* 6, 331–340.

Kelley, Colin P., Shahrzad Mohtadi, Mark A. Cane, Richard Seager, and Yochanan Kushnir. 2015. Climate change in the Fertile Crescent and implications of the recent Syrian drought. *Proceedings of the National Academy of Sciences* 112 (11): 3241–3246.

Selby, Jan, Omar S. Dahi, Christiane J. Fröhlich, and Mike Hulme. “Climate Change and the Syrian Civil War Revisited.” *Political Geography* 60 (2017): 232–44.

Gleick, Peter H. “Climate, Water, and Conflict: Commentary on Selby et Al. 2017.” *Political Geography* 60 (2017): 248–50.

Hendrix, Cullen S. “A Comment on ‘Climate Change and the Syrian Civil War Revisited.’” *Political Geography* 60 (September 1, 2017): 251–52.

Kelley, Colin P., Shahrzad Mohtadi, Mark Cane, Richard Seager, and Yochanan Kushnir. “Commentary on the Syria Case: Climate as a Contributing Factor.” *Political Geography* 60 (2017): 245–47.

Selby, Jan. “Climate Change and the Syrian Civil War Revisited: A Rejoinder” 60 (2017): 253–55.

### **Week 14 (December 4) – Myanmar and India/Bangladesh and Wrap-Up**

Busby chapter.

Webster, Peter. 2008 Myanmar’s deadly daffodil. *NatureGeoScience*. 1-3.

Mirante, Edith. 2008. The Ruby Ape: A Deadly Storm and a Lethal Regime. *Guernica*. Parts 1 and 2.

Larkin, Emma. 2011. *No bad news for the King: The true story of Cyclone Nargis and its aftermath in Burma*. Selected pages.



Emanuel, Kerry. 2005. "The Great East Pakistan Cyclone of 1970." *Divine Wind*. 221-226.

Hossain, Naomi. "The 1970 Bhola Cyclone, Nationalist Politics, and the Subsistence Crisis Contract in Bangladesh." *Disasters* 42, no. 1 (January 1, 2018): 187–203.

Haque, Ubydul. 2011. Reduced death rates from cyclones in Bangladesh: what more needs to be done? *Bulletin of the World Health Organization*. 150-156.

**Final Papers Due: Midnight, December 14**

## RESOURCES

### Publications

Backdraft Podcast Series.

<https://www.podomatic.com/podcasts/ecsp-www>

Daniel Moran, 2012. Climate Change and National Security: A Country-Level Analysis, Georgetown University Press. <http://press.georgetown.edu/book/georgetown/climate-change-and-national-security>

David Reed, 2014. In Pursuit of Prosperity: U.S Foreign Policy in an Era of Natural Resource Scarcity. (Routledge).

David Reed, 2017. Water, Security, and U.S. Foreign Policy Routledge

Office of the Director of National Intelligence, 2016. Implications for US National Security of Anticipated Climate Change.

[https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/Implications\\_for\\_US\\_National\\_Security\\_of\\_Anticipated\\_Climate\\_Change.pdf](https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/Implications_for_US_National_Security_of_Anticipated_Climate_Change.pdf)

Other USG Documents

<https://climateandsecurity.org/resources/u-s-government/>

<https://climateandsecurity.org/resources/u-s-government/intelligence/>

Other Govt & IOs

<https://climateandsecurity.org/resources/other-governments-and-regional-institutions/>

<https://climateandsecurity.org/resources/international-institutions/>

### Organizational Resources

Adelphi, <https://www.adelphi.de/en/topics/climate/climate-and-security>

American University, Inventory of Conflict and the Environment,  
<http://www1.american.edu/ted/ice/iceall.htm>

American Security Project, <http://www.americansecurityproject.org/climate-security/>

Center for American Progress, <https://www.americanprogress.org/projects/climate-migration-security/view/>

Center for Climate and Security, <https://climateandsecurity.org/>

Climate Change and African Political Stability (CCAPS), <https://www.strausscenter.org/ccaps/>

CNA Corporation, <https://www.cna.org/mab/reports>

Complex Emergencies and Political Stability in Asia (CEPSA),  
<https://www.strausscenter.org/cepsa/>

ECC Factbook. [www.newclimateforpeace.org/thematic-reading/factbook](http://www.newclimateforpeace.org/thematic-reading/factbook)

International Alert, <http://international-alert.org/climate-change>

New Security Beat, <https://www.newsecuritybeat.org/>

Oregon State, Transboundary Freshwater Dispute Database,  
<http://www.transboundarywaters.orst.edu/>

Pacific Institute, Water Conflict Chronology, <http://www2.worldwater.org/conflict/>

Wilson Center Environmental Change and Security Program,  
<https://www.wilsoncenter.org/program/environmental-change-and-security-program>

### **Multi-Media**

Climate for Conflict

<http://thegroundtruthproject.org/somalia-climate-change-conflict-podcast/>

Years of Living Dangerously

<http://yearsoflivingdangerously.com/>

### **Data**

UNEP Global Risk Data Platform

<http://www.preventionweb.net/english/hyogo/gar/atlas/>

EM-DAT International Disaster Database

<http://www.emdat.be/>

Munich-Re (German re-insurer with disaster data)

<http://natcatservice.munichre.com/>