

## Curriculum Vitae

ELGENE OWEN BOX

### Personal Information

Address: Department of Geography  
University of Georgia  
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Birth: 16 December 1945 at Corpus Christi, Texas (U.S.A.)

### Education

B.A. 1967 University of Texas (mathematics)  
M.A. 1969 Duke University (mathematics)  
Ph.D. 1978 University of North Carolina (ecology)

### Professional Employment

Permanent Position: Department of Geography, University of Georgia (since 1979);  
Professor (since 1995)  
Ph.D. Faculty in Ecology, University of Georgia (since 1980)

1992-1994 Toyota Crown Guest Research Professor, University of Tokyo, Inst. of Industrial Science  
(Global Ecology group)  
1981-1982 Visiting Scientist, Centre d'Etudes Phytosociologiques et Ecologiques, CNRS,  
Montpellier (France)  
1978-1979 Instructor, Duke University (Forestry/Environmental Studies)  
1973-1974 Visiting Scientist, Kernforschungsanlage, Jülich (Germany)

### Professional Offices

International Association for Vegetation Science: President (1994-98, 1998-2003, 2003-07);  
Vice-President (one of five, 1990-1994); Advisory Council member (since 2007)  
Executive Committee, International Society for Tropical Ecology (1995-98)  
Secretary, Plant Section, International Society for Biometeorology (1984-87)

### Areas of Activity

Global ecology: ecosystem structure and function, environmental limits, carbon budget  
Vegetation science: world vegetation, vegetation dynamics, plant geography, response to climate change  
Plant ecology, especially plant functional types  
Geographical modeling, especially involving climate, water balance, and AVHRR satellite data  
Comparative ecology: especially East Asia and eastern North America  
Vegetation of the southeastern US coastal plain

## Teaching

- Courses: Weather and Climate (since 1979, up to 300 students per class if super-section)  
 Plant Geography (10-30 students annually, since 1981)  
 Conservation Ecology (12-30 students annually, 1980-1990)  
 Physical Geography (30-80 students per class, since 2012)  
 Biogeography (10 students per class, 2013 only, so far)
- Seminars: Landscape Ecology (1986, 1987), Vegetation Analysis Methods (1988, 1996),  
 Global Climate Change (1990, 1998), Vegetation Dynamics (1991), Vegetation Response to  
 Climate Change (1994), Geographic Modeling (1997, 2000), Nature Reserves (1999)  
 - Seminar in Geoecology (since 2001)

## Selected Grants

University of Georgia (2000): State-of-the-Art Conference: The Big Unknowns in Global Change (\$15K)

Toyota Corporation (1991-94): Toyota Crown Guest Research Professorship, Tokyo University  
 (about \$550,000, including salary)

Environmental Protection Agency (1990-93): Consultant for "Potential Effects of Global Climate Change  
 on the Maintenance of Biodiversity in Florida" (grant to D. W. Crumpacker) (field expenses)

Japanese Ministry of Science (1988-90): US organizer for Eastern North American Vegetation Survey  
 (\$2000/year, plus expenses for four UGa graduate students)

NASA (1985-1987, 1988): Comparison of Simulation-Modeling and Satellite Techniques for Monitoring  
 Primary Production, Decomposition, and Related Ecological Processes" (\$55,000)

## Editorial and Review Work

- Editorial board: *Vegetatio* (1991-94), *Natural History Research* (Chiba, 1990s),  
*Botanica Pacifica* (Vladivostok, since 2012)
- Abstract translator: *Tuexenia* (1981-2003)
- Manuscript reviewing: about 20 additional journals
- Proposal reviewing: NSF (3 divs.), NASA, US Dept Energy, EPA, Australian Research Council

## Other Professional Service

- Organizer/co-organizer, special symposia for:
- International Assn. for Vegetation Science (Korea 2002, Lyon 2011)
  - International Botanical Congress (Vienna 2005, St. Louis 1999)
  - Internat. Congress of Ecology (Seoul 2002, Firenze 1998, Yokohama 1990)
  - American Institute Biological Sciences (Davis 1988)
  - International Congress of Biometeorology (Purdue 1987)
- Organizer/leader, IAVS Phytogeographical Excursion across SE USA (June 1995)
- US organizer, Eastern North American Vegetation Survey 1988-90 (team funded by Japan)

## University Service

- Franklin College Senate (1997-2000) and Curriculum Committee (1997-99, chair 1998-99)
- Department review committees: Environmental Design (1996), Sociology (1985-86)

Geography Department: Graduate Coordinator (2002-04), MS degree proposal 1996-99

## Publications

### 1. Books

Box, E. O. 1981. *Macroclimate and Plant Forms: An Introduction to Predictive Modeling in Phytogeography*. Tasks for Vegetation Science, Vol. 1. Den Haag: Dr. W. Junk BV, Publisher. 258 pp., 25 world maps.

Miyawaki, A., and E. O. Box 2006. *The Healing Power of Forests*. Kôsei Publ. Co., Tokyo. 286pp.

#### a. Books and Book Sections Edited

Driscoll, D., and E.O. Box (eds.) 1989. *Proceedings of XIth Congress of the International Society of Biometeorology*. SPB Acad. Publisher bv. 405 pp.

Box, E. O. (ed.), with R. K. Peet, T. Masuzawa, I. Yamada, K. Fujiwara and P. F. Maycock (co-eds.) 1995. *Vegetation Science in Forestry: Global Perspective based on Forest Ecosystems of East and Southeast Asia*. Handbook of Vegetation Science, vol. 12/1. Dordrecht: Kluwer. 663 pp.

Box, E. O., and S. Pignatti (eds.) 2000. "Scoperta e Spoliazione della Biosfera" (Discovery and Spoliation of the Biosphere). Sect. 2 in: *Il Mondo dei Viventi* (The Living World), pp. 379-661. "Frontiere della Vita" (Frontiers of Life), vol. 4. Istituto della Enciclopedia Italiana, Roma.

Box, E. O., T. Nakashizuka, and A. Fischer (eds.) 2002. *Dynamics of Temperate Forests*. Special Features in Vegetation Science, vol. 17. Opulus Press, Uppsala. 148 pp.

Kolbek, J., M. Srutek, and E. O. Box (eds.) 2003. *Forest Vegetation of Northeast Asia*. Geobotany 28. Kluwer, Dordrecht. 472 pp.

Box, E. O., and K. Fujiwara (eds.) 2015. *Warm-Temperate Deciduous Forests around the Northern Hemisphere*. Geobotany Series. Springer-Verlag, Heidelberg. 292pp.

Box, E. O. (ed.) 2016. *Vegetation Structure and Function at Multiple Spatial, Temporal and Conceptual Scales*. Springer. 578pp.

#### b. Introductions in Edited Books (see books above)

Box, E. O., and S. Pignatti 2000. Introduzione. To: "Scoperta e Spoliazione della Biosfera", Sect. 2 in: *Il Mondo dei Viventi*, pp. 379-382. "Frontiere della Vita" series, vol. 4. Istituto della Enciclopedia Italiana, Roma.

Box, E. O., T. Nakashizuka, and A. Fischer 2002. Dynamics of temperate forests: an introduction. In: *Dynamics of Temperate Forests* (E. O. Box et al., eds.), pp. 1-3. Opulus Press, Uppsala.

Kolbek, J, M. Srutek, and E. O. Box 2003. Introduction. In: *Forest Vegetation of Northeast Asia* (J. Kolbek et al., eds.), pp. 1-3. Kluwer, Dordrecht.

Box, E. O. (ed.) 2016. Introduction: Scales and Methods. In: *Vegetation Structure and Function at Multiple Spatial, Temporal and Conceptual Scale* (E. O. Box ed.), pp xxi-xl. Springer.

#### c. Field Guidebooks Written and Edited

Box, E. O. 1995. Excursion Guides for the IAVS field excursions in the Southeastern USA. 59 pp (pre-symposium), 122pp (main excursion) and 170pp (main plus Florida).

Fujiwara, K., and E. O. Box (eds.) 2000. A Guide Book of the Post-Symposium Excursion in Japan.

43rd IAVS Post-Symposium Excursion Committee, Yokohama National University. 218 pp.

Tsuchida, K., H. Ida, and E. O. Box (eds.) 2000. Mid-Symposium Excursion Guide. 43rd IAVS Mid-Symposium Excursion Committee, Nagano Nature Conservation Research Institute, Nagano. 56 pp.

**d. Books in Progress**

*Vegetation of East Asia* (in prep., volume in series), with K. Fujiwara and A. Miyawaki.

**2. Journal Articles**

Lieth, H. and E. O. Box 1972. Evapotranspiration and primary productivity; C. W. Thornthwaite Memorial Model. Public. in *Climatology* (Univ. of Delaware, Elmer, New Jersey), 25(3):37-46.

Walter, H., and E. O. Box 1976. Global classification of natural terrestrial ecosystems. *Vegetatio*, 32:72-81.

Lieth, H., and E. O. Box 1977. The gross primary productivity pattern of the land vegetation: A first attempt. *Tropical Ecology*, 18:109-115.

Box, E. O. 1978. Geographical dimensions of terrestrial net and gross primary productivity. *Radiation and Envl. Biophysics*, 15:305-322.

Box, E. O. 1981. Predicting physiognomic vegetation types with climate variables. *Vegetatio*, 45:126-135.

Folkoff, M. E., V. Meentemeyer, and E. O. Box 1981. Climatic control of soil acidity. *Phys. Geogr.*, 1:116-124.

Meentemeyer, V., E. O. Box, and R. Thompson 1982. World patterns and amounts of terrestrial plant litter production. *BioScience*, 32:125-128.

Box, E. O. 1982. Biosphere processes and natural emissions to the atmosphere: A quantitative geographic modeling basis. *J. Air Pollution Control Assn.*, 32:954-957.

Box, E. O. 1982. Life-form composition of Mediterranean terrestrial vegetation in relation to climatic factors. *Ecologia Mediterranea* (Marseille), 8:173-181.

Brook, G. A., M. E. Folkoff, and E. O. Box 1983. A world model of soil carbon dioxide. *Earth Surface Processes*, 8:79-88.

Box, E. O. 1984. Productivity and plant types--Some thoughts on a synthesis. *Portugaliae Acta Biologica*, Series A, 17:129-148.

Peters, C. R., E. M. O'Brien, and E. O. Box 1984. Plant types and seasonality of wild-plant foods, Tanzania to southwestern Africa: Resources for models of the natural environment. *J. Human Evolution*, 13:397-414.

Meentemeyer, V., J. Gardner, and E. O. Box 1985. World patterns and amounts of detrital soil carbon. *Earth Surface Processes*, 10:557-567.

Box, E. O. 1986. Some climatic relations of the vegetation of Argentina, in global perspective. *Veröff. Geobot. Inst. ETH, Stiftung Rübel* (Zürich), pp. 181-216.

Gillette, D. A., and E. O. Box 1986. Modeling seasonal changes of atmospheric carbon dioxide and carbon-13.

*J. Geophysical Research*, 91(D4):5287-5304.

- Box, E. O. 1987. Modeling vegetation-environment relationships, with Mediterranean examples. *Annali di Botanica*, 45(1):7-36.
- Box, E. O. 1987. Plant Life Forms in Mediterranean Environments. *Annali di Botanica*, 45(2):7-42.
- Miyawaki, A., K. Fujiwara, and E. O. Box 1987. Toward harmonious green urban environments in Japan and other countries. *Bull. Inst. Envl. Sci. Techn., Yokohama Natl. Univ.*, 14(1):67-82.
- Box, E. O. 1988. Estimating the seasonal carbon source-sink geography of a natural steady-state terrestrial biosphere. *J. Appl. Meteorol.*, 27:1109-1124.
- Box, E. O. 1988. Some similarities in the climates and vegetations of central Honshu and central eastern North America. *Veröff. Geobot. Inst. ETH, Stiftung Rübel (Zürich)*, 98:141-168.
- Box, E. O., and K. Fujiwara 1988. Evergreen broad-leaved forests of the southeastern United States: preliminary description. *Bull. Inst. Environm. Sci. Technol., Yokohama Natl. Univ.*, 15:71-93.
- Box, E. O., B. N. Holben, and V. Kalb 1989. Accuracy of the AVHRR Vegetation Index as a predictor of biomass, primary productivity, and net CO<sub>2</sub> flux. *Vegetatio*, 80:71-89.
- Box, E. O., K. Fujiwara, Hao Y.-L., Zhong Y., Fu Q.-H., and Xiao B.-Sh. 1989. A tropical montane evergreen forest and other vegetation on Hainan Island, southern China. *Bull. Inst. Environm. Sci. Technol., Yokohama Natl. Univ.*, 16:75-94.
- Myers, D. N., and E. O. Box 1989 [sic, appeared 1993]. Measuring settlement vegetation: structure and function. *Braun-Blanquetia*, 3:9-20.
- Box, E. O., Song Y.-Ch., A. Miyawaki and K. Fujiwara 1991. An evergreen broad-leaved forest in transitional eastern China. *Bull. Inst. Environm. Sci. Technol., Yokohama Natl. Univ.*, 17:63-84.
- Box, E. O., K. Fujiwara, and Qiu X.-Zh. 1991. Diversity and dissimilarity of three forest types in Xishuangbanna, tropical southern China. *Bull. Inst. Environm. Sci. Technol., Yokohama Natl. Univ.*, 17:85-105.
- Box, E. O. 1992. Comparing the natural montane vegetation types of East Asia and eastern North America. *Braun-Blanquetia*, 5:22-29.
- Honda, Y., Sh. Murai, E. O. Box, and Sh. Goto 1993. Ningen katsudô ni yoru chikyuu kankyô eikyô hyôka ni kan suru kenkyuu [Research on assessment of the effect of human activity on the global environment]. *Report Inst. Industr. Sci. Tokyo Univ.*, 38(2):30-52.
- Box, E. O., D. W. Crumpacker, and E. D. Hardin 1993. A climatic model for plant species locations in Florida. *J. Biogeography*, 20:629-644.
- Box, E. O., and Bai X.-M. 1993. A satellite-based world map of current terrestrial net primary productivity. *Seisan Kenkyuu (Tokyo)*, 45(9):666-672.
- Berg, B., M. P. Berg, P. Bottner, E. O. Box, and 14 others, 1993. Litter mass loss rates in pine forests of Europe and Eastern United States: some relationships with climate and litter quality. *Biogeochem.*, 20:127-159.
- Tsuruoka, M., Ry. Shibazaki, T. Wada, E. O. Box and Sh. Murai 1994. [Feedback control in maintenance of standing balance by humans: 1. Analysis by 3D videogrammetric data and data from test on balancing

ability]. *Seisan Kenkyuu* (Tokyo), 46(1):33-36 (in Japanese).

- Tsuruoka, M., Ry. Shibazaki, T. Wada, E. O. Box and Sh. Murai 1994. [Feedback control in maintenance of standing balance by humans: 2. Analysis by 3D videogrammetric data and data from test on balancing ability]. *Seisan Kenkyuu* (Tokyo), 46(1):37-40 (in Japanese).
- Box, E. O., and E. Pignatti Wikus 1994. Deciduous broad-leaved forests of the eastern USA: Basis for biogeographic comparison. *Boll. Soc. Adriatica di Scienze*, 75:25-33.
- Box, E. O. 1995. Factors determining distributions of tree species and plant functional types. *Vegetatio*, 121:101-116.
- Box, E. O. 1996. Plant functional types and climate at the global scale. *J. Vegetation Science*, 7:309-320.
- Box, E. O., Ch.-H. Chou, and K. Fujiwara 1998. Richness, climatic position, and biogeographic potential of East Asian laurophyll forests, with particular reference to examples from Taiwan. *Bull. Inst. Environm. Sci. Technol., Yokohama Natl. Univ.*, 24:61-95.
- Box, E. O., D. W. Crumpacker, and E. D. Hardin 1999. Predicted effects of climatic change on distribution of ecologically important native tree and shrub species in Florida. *Climatic Change*, 41:213-248.
- Box, E. O. 2000. Biodiversität Nordamerikas. *Berichte d. Reinhold-Tüxen-Gesellschaft* (Hannover), 12:223-239.
- Box, E. O., and J.-N. Choi 2000. Estimating species-based community integrity under global warming, with special reference to the western Mediterranean region. *Phytocoenologia*, 30:335-352.
- Box, E. O., K. Fujiwara, G. Nakhutsrishvili, N. Zazanashvili, R. J. Liebermann, and A. Miyawaki 2000. Vegetation and landscapes of Georgia (Caucasus), as a basis for landscape restoration. *Bull. Inst. Environm. Sci. Technol., Yokohama National University*, 26:69-102.
- Lassiter, R. R., E. O. Box, R. G. Wiegert, J. M. Johnston, J. Bergengren, and L. A. Suarez 2000. Vulnerability of ecosystems of the mid-Atlantic region, USA, to climate change. *Envl. Toxicol. Chem.*, 19(4):1153-1160.
- Crumpacker, D. W., E. O. Box, and E. D. Hardin 2001. Implications of climatic warming for conservation of native trees and shrubs in Florida. *Conservation Biology*, 15(4):1008-1020.
- Crumpacker, D. W., E. O. Box, and E. D. Hardin 2001. Temperate-subtropical transition areas for native trees and shrubs in Florida: Present locations, predicted changes under climatic warming, and implications for conservation. *Natural Areas Journal*, 21(2):136-148.
- Crumpacker, D. W., E. O. Box, and E. D. Hardin 2001. Potential breakup of Florida plant communities as a result of climatic warming. *Florida Scientist*, 64(1):29-43.
- Crumpacker, D. W., E. O. Box, and E. D. Hardin 2002. Use of plant climatic envelopes to design a monitoring system for biotic effects of climatic warming. *Florida Scientist*, 65:159-184.
- Box, E. O. 2002. Vegetation analogs and differences in the Northern and Southern Hemispheres: A global comparison. *Plant Ecology*, 163:139-154.
- Pignatti, S., E. O. Box, and K. Fujiwara 2002. Principles of vegetation science. *Annali di Botanica*, DA II (2002):31-58.
- Box, E. O. 2004. Gross production, respiration and biosphere CO<sub>2</sub> fluxes under global warming. *Tropical Ecology*, 45:13-29.

- Box, E. O., and M. Manthey 2005. Oak and other deciduous forest types of eastern North America and Europe. *Botanika Chronika* (Greece), 18(1):51-62.
- Manthey, M., and E. O. Box 2007. Realized climatic niches of deciduous trees: comparing western Eurasia and eastern North America. *J. Biogeography*, 34:1028-1040.
- Hayasaka, D., K. Fujiwara, and E. O. Box 2009. Recovery of sandy-beach and maritime-forest vegetation on Phuket Island (Thailand) after the major Indian Ocean tsunami of 2004. *Applied Vegetation Science*, 12(2):211-224.
- Box, E. O., and K. Fujiwara 2010. What else can one do with relevé data: Eastern North America? *Braun-Blanquetia*, 46:139-142.
- Fujiwara, K., E. O. Box, and A. Harada 2010. The warm-temperate richness zone in coastal dune vegetation of continental east sides (Northern Hemisphere). *Braun-Blanquetia*, 46:241-249.
- Box, E. O., and K. Fujiwara 2011. Sorting plots not taxa for studying plant species richness. *Plant Biosystems*, 145 (supplement):46-53.
- Hayasaka, D., M. Akasaka, D. Miyauchi, E. O. Box, and T. Uchida 2012. Qualitative variation in roadside weed vegetation along an urban-rural road gradient. *Flora*, 207:126-132 [doi:10.1016/j.flora.2011.11.005].
- Box, E. O., and K. Fujiwara 2012. A comparative look at bioclimatic zonation, vegetation types, tree taxa and species richness in Northeast Asia. *Botanica Pacifica*, 1:5-20.
- Wullschleger, S., H. E. Epstein, E. O. Box, E. S. Euskirchen, S. Goswami, C. M. Iversen, J. Kattge, R. J. Norby, P. M. van Bodegom, and Xu Xiaofeng 2014. Plant functional types in Earth system models: Past experiences and future directions for application of dynamic vegetation models in high-latitude ecosystems. *Annals of Botany*, 114:1-16.
- Box, E. O. 2014. Uplands and Global Zonation. *Contributii Botanice*, (Cluj-Napoca), 49:223-254.

### 3. Chapters in Books

- Box, E. O. 1975. Quantitative Evaluation of Global Productivity Models Generated by Computers. In: *Primary Productivity of the Biosphere* (H. Lieth and R. H. Whittaker, eds.), pp 265-283. Springer, New York.
- Box, E. O. 1981. Foliar Biomass: Data-Base of the International Biological Program and Other Sources. In: *Atmospheric Biogenic Hydrocarbons* (J. J. Bufalini and R. R. Arnts, eds.), vol. 1: Emissions, pp. 121-148. Ann Arbor Science series.
- Box, E. O. 1982. Productivity of Aromatic Plants: Climatic Models. In: *Aromatic Plants: Basic and Applied Aspects* (N. Margaritis et al., eds.), pp. 87-99. Den Haag: Martinus Nijhoff Publishers.
- Walter, H., and E. O. Box 1983. Chapters 2-9 in: *Temperate Deserts and Semi-Deserts* (N. E. West, ed.). Ecosystems of the World, vol. 5. Elsevier, Amsterdam.
- Chapter 2: Overview of Eurasian Continental Deserts and Semi-Deserts, pp. 3-8
- Chapter 3: Caspian Lowland Biome, pp. 9-42
- Chapter 4: Semi-Deserts and Deserts of Central Kazakhstan, pp. 43-78
- Chapter 5: Middle Asian Deserts, pp. 79-104
- Chapter 6: The Kara-Kum Desert, an Example of a Well Studied Eu-Biome, pp. 105-160



- Chapter 7: The Orobiomes of Middle Asia, pp. 161-192  
 Chapter 8: The Deserts of Central Asia, pp. 193-236  
 Chapter 9: The Pamir--an Ecologically Well Studied High-Mountain Biome, pp. 237-270  
 In Chapter 17: Climate of Patagonia, pp. 432-435.

- Box, E. O. 1986. Data Problems in Large-Area Ecological Modeling. In: *Research Data Management in the Ecological Sciences* (W. Michener, ed.), pp. 246-262. Columbia: University of South Carolina Press.
- Meentemeyer, V., and E. O. Box 1987. Scale effects in studies of landscape diversity and disturbance. In: *The Role of Landscape Heterogeneity in the Spread of Disturbance* (M. G. Turner, ed.), pp 15-34. Springer.
- Box, E. O. 1988. Effects of Seasonal Vegetation Structure on the Carbon Dynamics of Terrestrial Biosphere Models. In: *Effect of Vegetation Structure and Composition on Carbon and Nutrient Economy* (J. Verhoeven et al., eds.), pp 19-27. Den Haag: SPB Academic Publishers.
- Box, E. O., and V. Meentemeyer 1991. Geographic Modeling and Modern Ecology. In: *Modern Ecology: Basic and Applied Aspects* (G. Esser and D. Overdieck, eds.), pp. 773-804. Elsevier, Amsterdam.
- Box, E. O. 1994. Eastern North America: Natural Environment and Sampling Strategy. In: *Vegetation in Eastern North America* (A. Miyawaki et al., eds.), pp 21-57. Tokyo University Press.
- Fujiwara, K., and E. O. Box 1994. Evergreen Broad-Leaved Forest Region of the Southeastern United States. In: *Vegetation in Eastern North America* (A. Miyawaki et al., eds.), pp 273-312. Tokyo University Press.
- Fujiwara, K., and E. O. Box 1994. Mangrove Vegetation in Eastern North America. In: *Vegetation in Eastern North America* (A. Miyawaki et al., eds.), pp 313-334. Tokyo University Press.
- Box, E. O. 1995. Global and local climatic relations of the forests of East and Southeast Asia. In: *Vegetation Science in Forestry* (E. O. Box et al., eds.), Handbook Vegetation Sci., 12/1, pp 23-55. Kluwer, Dordrecht.
- Box, E. O. 1995. Global Potential Natural Vegetation: Dynamic Benchmark in the Era of Disruption. In: *Toward Global Planning of Sustainable Use of the Earth -- Development of Global Eco-engineering* (Sh. Murai, ed.), pp77-95. Elsevier, Amsterdam.
- Box, E. O. 1995. Kikô jôken ni yoru senzai shizen shokusei-no saigen [Reproduction of latent natural vegetation from climatic conditions]. In: *Chikyuu Kankyô-no Hozen to Kaihatsu* [Preserv. and Dev. of Global Env't.] (Sh. Murai et al., eds.), pp. 45-82. Tokyo Univ. Press (translated into Japanese by Ry. Shibasaki.)
- Box, E. O. 2000. Climate and Climatology in Japan. In: A Guide Book of the Post-Symposium Excursion in Japan. (43rd IAVS Post-Symposium Excursion Committee, eds.), pp. 144-169.
- Box, E. O. 2000. Un Pianeta in Trasformazione [A Changing Planet]. In: *Il Mondo dei Viventi* [The Living World] (A. Turchi, series editor), pp 459-468 (translated from English by M. Chiarioni). "Frontiere della Vita" [Frontiers of Life] series, vol. 4. Istituto della Enciclopedia Italiana, Roma.
- Box, E. O., You Hai-Mei, and Li D.-L. 2001. Climatic ultra-continentality and the abrupt boreal-nemoral forest boundary in northern Manchuria. In: *Studies on the Vegetation of Alluvial Plains* (Assn. Commemorate Retirement of Prof. Okuda, eds.), pp 183-200. Yokohama.
- Box, E. O., and J. N. Choi 2003. Climate of Northeast Asia. In: *Forest Vegetation of Northeast Asia* (J. Kolbek et al., eds.), pp 5-31. Kluwer, Dordrecht.
- Box, E. O. 2004. Appalachen. In: *Pflanzenwelt der Gebirge* (C. A. Burga, et al., eds.), pp 202-209 (with additional

photos and standard material by C. A. Burga). Verlag Eugen Ulmer, Stuttgart.

- Box, E. O. 2004. Felsengebirge und andere Gebirge des westlichen Nordamerika. In: *Pflanzenwelt der Gebirge* (C. A. Burga, et al., eds.), pp 186-201 (with additional photos and standard material by C. A. Burga). Verlag Eugen Ulmer, Stuttgart.
- Sarmiento, F. O., E. O. Box, and E. L. Utery 2004. GIScience and Tropical Mountains: A challenge for geocological research. In: *Geographic Information Science and Mountain Geomorphology* (M. P. Bishop and J. Shroder, eds.), pp. 289-307. Praxis Scientific Publishing and Springer-Verlag.
- Box, E. O., and K. Fujiwara 2005. Vegetation Types and their Distribution. In: *Vegetation Ecology* (E. van der Maarel, ed.), pp. 106-128. Blackwell Scientific, Oxford.
- Box, E. O., and K. Fujiwara 2013. Vegetation Types and their Broad-Scale Distribution. In: *Vegetation Ecology* (E. van der Maarel, ed.), 2nd ed., pp 455-485. Blackwell Scientific, Oxford.
- Box, E. O., and K. Fujiwara 2015. Introduction: Why Warm-Temperate Deciduous Forests? In: *Warm-Temperate Deciduous Forests around the Northern Hemisphere* (E. O. Box and K. Fujiwara, eds.), pp 1-5. Springer-Verlag.
- Box, E. O., and K. Fujiwara 2015. Warm-Temperate Deciduous Forests: Concept and Global Overview. In: *Warm-Temperate Deciduous Forests around the Northern Hemisphere* (E. O. Box and K. Fujiwara, eds.), pp 7-26. Springer-Verlag.
- Box, E. O. 2015. Warm-Temperate Deciduous Forests of Eastern North America. In: *Warm-Temperate Deciduous Forests around the Northern Hemisphere* (E. O. Box and K. Fujiwara, eds.), pp 225-255. Springer-Verlag.
- Box, E. O. 2015. Quantitative Delimitation of Warm-Temperate Deciduous Forest Areas. In: *Warm-Temperate Deciduous Forests around the Northern Hemisphere* (E. O. Box and K. Fujiwara, eds.), pp 277-284. Springer, Berlin.
- Box, E. O. 2016. Global Bioclimatic Zonation. In: *Vegetation Structure and Function at Multiple Spatial, Temporal and Conceptual Scale* (E. O. Box ed.), pp 3-52. Springer.
- Box, E. O. 2016. Assessing Species Abundance from Relevé Data: Eastern North America. In: *Documents Phytosociologiques*, vol. 8, pp 341-348.

#### 4. Encyclopedia Articles

- Box, E. O. 1987. Plant Geography. In: *McGraw-Hill Encyclopedia of Science and Technology*, 6th ed., Vol. 13, pp. 597-600. New York: McGraw-Hill Book Co.
- Box, E. O. 1987. Vegetation and Ecosystem Mapping. In: *McGraw-Hill Encyclopedia of Science and Technology*, 6th ed., Vol. 19, pp. 169-175. New York: McGraw-Hill Book Co.
- Box, E. O. and K. Fujiwara 2001. Ecosystems of Asia. In: *Encyclopedia of Biodiversity* (S. Levin et al., eds.), vol. 1, pp. 261-291. Academic Press, San Diego.

#### 5. Papers in Proceedings Volumes

- Box, E. O. 1979. The MAPCOUNT Series of Programs for Analysis and Manipulation of SYMAP Maps. In: *Mapping Software and Cartographic Data-Bases*, Harvard Library of Computer Mapping, vol. 2, pp. 21-29. Cambridge (Mass.): Harvard University.
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  2. Annual Potential Net Primary Productivity (2 models)
  3. Annual Potential Evapotranspiration
  4. Annual Moisture Index (Precipitation/Potential Evapotranspiration)
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  - pp 20-24: Study Area, Methodology and Data (Box & Fujiwara)
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- 1987: International Congress of Biometeorology, West Lafayette (Indiana)
- 1990: "Forest Ecosystems of East and Southeast Asia, in Global Perspective", International Congress of Ecology, Yokohama (with Kazue Fujiwara)

- 1998: "Climate Change and Vegetation Shift", International Congress of Ecology, Firenze (with Kazue Fujiwara)
- 1999: "Vegetation of Analogous Environments in the Northern versus Southern Hemisphere", International Botanical Congress, St. Louis (with Kazue Fujiwara)
- 2002: "Ecology in Beech and Oak Forests", International Congress of Ecology, Seoul (with Gian-Reto Walther and Kazue Fujiwara)
- 2010: "Warm-Temperate Deciduous Forests around the Northern Hemisphere", Annual meeting, International Association for Vegetation Science, Lyon (with Kazue Fujiwara)
- 2012: "*Quercus* versus *Fagus* in Asian and other Temperate Deciduous Forests", Annual meeting, International Association for Vegetation Science, Mokpo (Korea) (with Kazue Fujiwara)

### **Professional Memberships**

- Currently:

International Association for Vegetation Science  
Ecological Society of America  
Reinhold-Tüxen-Gesellschaft (German Phytosociological Society)  
Torrey Botanical Club  
Association of Southeastern Biologists  
Southern Appalachian Botanical Club  
Georgia Botanical Society

- Formerly:

American Institute of Biological Sciences  
International Association for Ecology (INTECOL)  
International Society of Tropical Ecology  
International Association for Landscape Ecology  
Organization for Tropical Studies  
Nippon Seitai-Gakkai (Japanese Ecological Society)