

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)
 - Intermnational Botanical Congress (Vienna 2005, St. Louis 1999)
 - Internat. Congress of Ecology (Seoul 2002, Firenze 1998, Yokohama 1990)
 - American Institute Biological Sciences (Davis 1988)
 - Internationl 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 Environ. 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 CO₂ 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 you chikyuu kankyo 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. Shibasaki, 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. Shibasaki, 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 CO₂ 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. Margaris 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 Orobomes 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 Envt.] (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-continentiality 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. Usery 2004. GIScience and Tropical Mountains: A challenge for geoecological 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)
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 4. Annual Moisture Index (Precipitation/Potential Evapotranspiration)
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- ### Special Sessions Organized/Co-organized for International/National Meetings
- 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)