

Übersicht 82:  
Literaturauswahl zu Simulationen von komplexen Systemen

(s. auch Übersicht 20 - biologische Systeme)

"Welt-Systeme":

- Meadows, D.: Die Grenzen des Wachstums. dva, Stuttgart, 1972  
 Forrester, J.W.: System Dynamics  
 Clark, J., Cole, S.: Models of world food supply and demand and nutrition. Food Policy 1(2) 130-142 (1976) Lit.2014,2281  
 Bruckmann, .(Ed): Moira: Food and Agriculture Model. IIASA, Wien, CP-77-1, Feb. 1977 (selbst)  
 Parikh, K., Rabar, F.(Eds): Food for all in a sustainable world. IIASA, Wien, SR-81-2. Wien, Aug. 1981 (selbst)  
 Csaki, C.: A national policy model for the Hungarian food and agriculture sector, IIASA, No.RR-81-23, Wien, 1981 (selbst)  
 Grün, J., Wiener, D.: Global denken - vor Ort handeln. Weltmodelle von Global 2000 bis Hermann Kahn. Dreisam-Verlag, Freiburg, 1984 (selbst)  
 Bremer, S.A. (ed): The Globus Model. Campus, Westview, Juli 1983  
 Bremer, S.A., Gruhn, W.L.: Micro Globus - a computer model (einschl. 5 Programm Disketten) Verl.Sigma, Berlin, 21.457 s.Lit.21.457

"Kleinere Gesellschaftliche-Systeme (einschl. "management")"

- Greenblatt, C.S., Duke, R.D.: Gaming-Simulation. Rationale, design and application. Sage, J.Wiley, New York, London, Sidney, Toronto, 1975 (selbst)  
 Dörner, D., Kreuzig, H.W., Reither, F., Stäudel, Th.: Lohhausen. Vom Umgang mit Unbestimmtheit und Komplexizität. H.Huber, Bern, Stuttgart, Wien, 1983 (selbst)  
 Dörner, C.D.: Psychologisches Experiment: Wie Menschen eine Welt verbessern wollten... (Tana-Land) bild der wissenschaft S.48-53, Feb. 1975 (Lit.19.650)  
 Hünermann, G.: Szenarien zur Entwicklung der Landwirtschaft. WZB, IIUG-rep-87-6, Berlin, 1987 Lit.19.453  
 Bechmann, A.: Landbau-Wende. Fischer, Frankfurt, 1987  
 Enquete-Kommission des Deutschen Bundestages "Einschätzung und Bewertung von Technikfolgen": Alternativen landwirtschaftlicher Produktion. Bonn, 427S., 1987 (selbst)  
 Miller, R.I.: Thought for food: An interactive simulation model of a food distribution model. Community Systems Foundation, Ann Arbor, Mich., 48p., 15.3.1980 Lit.7716  
 OECD: The Sahel facing the future. OECD, Paris, 1988 (Lit.22.914)  
 Vester, F. u.a.: Systemstudie Ökoland. Arbeitsbericht aus dem Inst.f.Interdependenz von Technik und Gesellschaft. Univ. Bundeswehr, München, Fak.Sozialwissenschaften, Neubiberg (bisher 6 Bände), bis 1988 (selbst)

"ökologisch. biologische Systeme"

- Richter, O.: Simulation des Verhaltens ökologischer Systeme. Verlag Chemie, Weinheim, 1985 Lit.20.017
- Schneider, S.H.: Klimamodelle. Spektrum der Wissenschaft, Sond. 2/1987. S.18-25 Lit.22.894
- Parry, M.L., Carter, T.R., Konij, N.T. (Eds): The impact of climatic variations on agriculture. Kluwer, Dordrecht, 2 vol, 1988 Lit.22.888(IIASA)
- Payer, H.-D., Seckmeyer, G.: Umweltsimulation für Ökotoxikologische Pflanzenexperimente. Labor 2000: 196-211 (1988) Lit.23.221
- Kutzbach, J.E. et al.: Climatic change of the last 18.000 years: observations and model simulation. Science 241 (4869) 1043-1052 (26.8.1988) Lit.23.054
- Dugdale, A.E., Payne, P.R.: Variability in crop yields as a cause of failure among peasant farmers. Ecol. Food Nutr. 22: 117-123 (1988) Lit.23.949

"physiologische. biologische Systeme"

- Booth, D.A. (ed): Hunger Model. Computable theory of feeding control. Academic, London, New York, San Francisco, 1978 (selbst)
- Calavan, M.M.: A model of food selection in Northern Thailand. Ecol. Food Nutr. 5(2) 63-74 (1976) Lit.2331
- Balintfy, J.L. et al.: Modelling food preferences over time. Operations Research 22(4) 711-726 (1974) Lit.6996
- Davis, J.D., Levine, M.W.: A model for the control of ingestion. Psychol. Rev. 84(4) 379-412 (1977) Lit.9.001
- Wack, J.T., Rodin, J.: Smoking and its effects on body weight and the systems of caloric regulation. Amer. J. clin. Nutr. 35(2) 366-380 (1982) Lit.8938
- Connor, H. et al.: A model of L(+)-lactate metabolism in normal men. Ann. Nutr. Metab. 26: 254-263 (1982) Lit.9239
- Mercer, L.P. et al.: A mathematical model for nutrition in toxicology. Nutr. Rep. Intern. 26(1) 115-120 (1982)
- Computer Systems for prediction of drug-nutrient interactions. J. Amer. Diet. Ass. 36(2) 278 (1986) Lit.15.357
- Saguy, I., Karel, M.: Modelling of quality deterioration during food processing and storage. Food Technology 34(2) 78-85 (1980)
- Mercer, L.P.: Mathematical models in nutrition. Nutr. Rep. Intern. 21(2) 189-198 (1980) Lit.6440
- Whittemore, C.T.: The use of a computer model in determining the nutrient requirements of pigs. Proc. Nutr. Soc. 39: 205-211 (1980)
- Garfinkel, D.: Computer modelling complex biological systems and their simplifications. Amer. J. Physiol. 239(1) R1-R6 (1980) CC23(35):124
- Forbes, J.M.: A model of the short-term control of feeding in the ruminants. Appetite 1(1) 21-41 (1980)
- Baldwin, R.L. et al.: The synthesis of models to describe metabolism and its integration. Proc. Nutr. Soc. 40: 139-145 (1981)
- Blincoe, C.: Thyroid homeostasis as studied by computer simulation. Int. J. Bio-Med. Comput. 12(2) 101-108 (1981) CC24(17)39

- Schulz, A.R.: Simulation of energy metabolism in the simple-stomached animal. *Brit.J.Nutr.* 39(2) 235-254 (1978)
- Rinzel, J.: Mathematical modelling and computation in physiology. *Fed.Proc.* 37(14) 2783-2810 (1978)
- Wichmann, H.E., Gross, R.: How mathematical models can interpret and predict experimental results in haematology. *Klin.Wochft.* 59: 1-4 (1981) Lit.7830
- Alpert, S.S. et al.: Rates of growth of the fat and fat-free energy reservoirs. *Amer.J.clin.Nutr.* 35(6) xxxii (1982) Lit.9180
- Toates, F.M.: The control of ingestive behavior by internal and external stimuli - a theoretical review. *Appetite* 2: 35-50 (1981) lit.9.921
- Bannert, N.: Entwicklung von Frequenz und Menge der Nahrungsaufnahme beim Säugling. *Ernährungsforschung* 27(6) 176-179 (1982) Lit.9.932
- Starbuck, W.H.: Computer simulation of human behavior. *Behav.Sci.* 28(2) 154-165 (1983) Lit.10.712
- Mercer, L.P. et al.: Control of physiological response in the rat by dietary nutrient concentration. *J.Nutr.* 114: 144-152 (1984) Lit.11.159
- Italie, T.B. van, Kissileff, H.R.: The physiological control of energy intake - an economic perspective. *Amer.J.clin.Nutr.* 38(12) 979-988 (1983) Lit.11.215
- Gill, M. et al.: Simulation of the metabolism of absorbed energy-yielding nutrients in young sheep. *Brit.J.Nutr.* 52: 621-649 (1984)
- Hallam, T.G., Luna, J.T.de: Effects of toxicants on populations: a quantitative approach. *J.theoret.Biol.* 109: 411-429 (1984) Lit.12.584
- Garfinkel, D.: Modelling of inherently complex biological systems - problems, strategies, methods. *Mathem.Biosci.* 72(2) 131-140 (1984) CC28(5)36
- Hansen, E.S., Lammert, O.: Prediction of weights in humans after overfeeding using the Payne-Dugdale model. *Human Nutr.Clin.Nutr.* 38C: 413-418 (1984) Lit.13.682
- FEBS Advanced Course Mathematical Modelling of Cellular Processes 1984. *Biomed.Biochim.Acta* 44(6) 823-993- (1985) CC28(37)135(1985)
- Gulliat, A., Meyer, J.A.: A test of Booth energy flow model (MARK 3) on feeding pattern in mice. *Appetite* 8(1) 67-78 (1987) NAR57:3219
- Horwitz, S. et al.: Calcium dynamics - a model system approach. *J.Nutr.* 117: 791-796 (1987) Lit.18.366
- Dugdale, A.E.; Payne, P.R.: A model of seasonal changes in energy balance. *Ecol.Food Nutr.* 19: 231-245 (1987) Lit.19.170
- Weinstein, M et al.: Forecasting CHD incidence, mortality and cost: The Coronary Heart Disease Policy Model. *Amer.J.Publ.Health* 77(11) 1417-1426 (1987) CC30(46)225
- Thomas, D.C.: Use of computer simulation to explore analytical issues in nested case-control studies of cancer involving extended exposures. *J.chron.Dis.* 40(Sup.2) 201S-208S (1987) Lit.20.128
- Dyke, B.: Computer simulation in anthropology. *Ann.Rev.Anthropol.* 10: 193-207 (1981)

Milligan, L.P. et al.: Simulation of energy costs associated with protein metabolism in growing lambs. Proc.Nutr.Soc. 47(1) 56A (1988) Lit.20.518

Booth, D.A.: A simulation model of psychosocial theory of human food-intake controls. Int.J.Vit.Nutr.Res. 58: 119-134 (1988) Lit.21.270

Bassingthwaighte, J.B.: Strides in the technology of systems physiology and the art of testing complex hypothesis. (Symposium) Fed.Proc. 46(8) 2473-2476 (1987) Lit.18.540

Kootsey, J.M.: Complexity and significance in computer simulations of physiological systems. Fed.Proc. 46(8) 2490-2493 (1987) Lit.18.542

Nathanson, M.H., McLaren, G.D.: Computer simulation of iron absorption: regulation of mucosal and systemic iron kinetics in dogs. J.Nutr. 117: 1067-1075 (1987) Lit.18.756