

PUBLICATIONS

1. A Alonso-Ayuso, LF Escudero, M Guignard, A Weintraub. Risk management for forestry planning under uncertainty in demand and prices. *European Journal of Operational Research*. Volume 267, Issue 3, 16 June 2018, Pages 1051-1074.
2. Eduardo Álvarez-Miranda, Jordi Garcia-Gonzalo, Felipe Ulloa-Fierro, Andrés Weintraub, Susana Barreiro. A multicriteria optimization model for sustainable forest management under climate change uncertainty: An application in Portugal. *European Journal of Operational Research*. 2017.
3. Fernando Alarcón, Guillermo Durán, Mario Guajardo, Jaime Miranda, Hugo Muñoz, Luis Ramírez, Mario Ramírez, Denis Sauré, Matías Siebert, Sebastián Souyris, Andrés Weintraub, Rodrigo Wolf-Yadlin, Gonzalo Zamorano. Operations research transforms the scheduling of chilean soccer leagues and south american world cup qualifiers. *Interfaces* 47 (1), 52-69. 2017.
4. JJ Troncoso, JJ., Weintraub, A., Martell, DL. Development of a threat index to manage timber production on flammable forest landscapes subject to spatial harvest constraints. *INFOR: Information Systems and Operational Research* 54 (3), 262-281. 2016.
5. Rios, I., Weintraub, A., Wets, RJB. Building a stochastic programming model from scratch: a harvesting management example. *Quantitative Finance* 16 (2), 189-199. 2016.
6. Garcia-Gonzalo, J., Pais, C., Bachmatiuk, J. and Weintraub, A. Accounting for climate change in a forest planning stochastic optimization model. *Canadian Journal of Forest Research* 46 (9), 1111-1121. 2016.
7. Garcia-Gonzalo, J., Pais, C., Bachmatiuk, J. and Weintraub, A. Accounting climate change in a stochastic optimization model in forest planning. *NRC Research Press (a division of Canadian Science Publishing)*, 2016.
8. Caro R., Epstein R., Santibañez P., Weintraub A. An integrated approach to the long-term planning process in the copper mining industry. *Handbook of Operations Research in Natural Resources*. 2016.

9. Bare, B. B., Weintraub, A. "Brief history of systems analysis in forest resources". *Annals of Operations Research*, 1-10, 2015.
10. Mikael Rönnqvist, Sophie D'Amours, Andres Weintraub, Alejandro Jofre, Eldon Gunn, Robert, G. Haight, David Martell, Alan T. Murray and Carlos Romero. *Operations Research challenges in forestry: 33 open problems*. *Annals of Operations Research* 232 (1), 11-40.
11. Troncoso, J., D'Amours, S., Flisberg, P., Roennqvist, M., Weintraub, A., "A mixed integer programming model to evaluate integrating strategies in the forest value chain - a case study in the Chilean forest industry", *Canadian Journal of Forest Research*, 45(7): 937-949, 2015.
12. Badilla, F., Watson, J. P., Weintraub, A., Wets, R. J. B., Woodruff, D. L. "Stochastic optimization models in forest planning: a progressive hedging solution approach". *Annals of Operations Research*, 1-16, 2014.
13. Alonso-Ayuso, A., Carvallo, F., Escudero, L. F., Guignard, M., Pi, J., Puranmalka, R., Weintraub, A. "Medium range optimization of copper extraction planning under uncertainty in future copper prices". *European Journal of Operational Research*, 233(3), 711-726, 2014.
14. Cortés, C. E., Gendreau, M., Rousseau, L. M., Souyris, S., Weintraub, A. "Branch-and-price and constraint programming for solving a real-life technician dispatching problem". *European Journal of Operational Research* ,238(1), 300-312, 2014.
15. Diaz-Balteiro, L., Martell, D. L., Romero, C., & Weintraub, A. "The optimal rotation of a flammable forest stand when both carbon sequestration and timber are valued: a multi-criteria approach". *Natural hazards*, 72(2), 375-387, 2014.
16. Bravo, F., Durán, G., Lucena, A., Marengo, J., Morán, D., & Weintraub, A. "Mathematical models for optimizing production chain planning in salmon farming". *International Transactions in Operational Research*, 20(5), 731-766, 2013.

17. Carvajal, R., Constantino, M., Goycoolea, M., Vielma, J. P., & Weintraub, A. "Imposing connectivity constraints in forest planning models". *Operations Research*, 61(4), 824-836, 2013.
18. Romero, G., Durán, G., Marenco, J., Weintraub, A. "An approach for efficient ship routing". *International Transactions in Operational Research*, 20(6), 767-794, 2013.
19. Epstein, R., Neely, A., Weintraub, A., Valenzuela, F., Hurtado, S., Gonzalez, G., ... and Angulo, G. "A strategic empty container logistics optimization in a major shipping company". *Interfaces*, 2012.
20. Hernández, P., Alonso-Ayuso, A., Bravo, F., Escudero, L. F., Guignard, M., Marianov, V., Weintraub, A. "A branch-and-cluster coordination scheme for selecting prison facility sites under uncertainty". *Computers & Operations Research*, 39(9), 2232-2241, 2012.
21. Epstein, R., Goic, M., Weintraub, A., Catalán, J., Santibáñez, P., Urrutia, R., Caro, F. "Optimizing long-term production plans in underground and open-pit copper mines". *Operations Research*, 60(1), 4-17, 2012.
22. Araya, F., Dell, R., Donoso, P., Marianov, V., Martínez, F., Weintraub, A. "Optimizing location and size of rural schools in Chile". *International Transactions in Operational Research*, 19(5), 695-710, 2012.
23. Mosquera, J., Henig, M. I., Weintraub, A. "Design of insurance contracts using stochastic programming in forestry planning". *Annals of Operations Research*, 190(1), 117-130, 2011.
24. Newman, A. M., Rubio, E., Caro, R., Weintraub, A., Eurek, K. "A review of operations research in mine planning". *Interfaces*, 40(3), 222-245, 2010.
25. Rey, P., Muñoz, J. A., Weintraub, A. "A Column Generation Model for Truck Routing in the Chilean Forest Industry". *INFOR*, special issue on Supply Chain Management in the Forest Industry.

26. I Gac, I., Martínez, F., and Weintraub, A. (2009). "A deterministic linear optimization model for allocating schools to zones". *Journal of the Operational Research Society*, 60(7), 895-905, 2009.
27. Goycoolea M, Murray A, Vielma J.P., et al, (2009). "Evaluating Approaches for Solving the Area Restriction Model in Harvest Scheduling". *Forest Science* 55(2): 149-165, 2009.
28. Basnet C. and Weintraub, A., "A genetic algorithm for a bicriteria supplier selection problem". *International Transactions in Operational Research* 16: 173-187, 2009.
29. D'Amours, S., Rönnqvist, M., & Weintraub, A. "Using operational research for supply chain planning in the forest products industry". *INFOR: Information Systems and Operational Research*, 46(4), 265-281, 2008.
30. Weintraub, A., Pereira, M., & Schultz, X. "A priori and a posteriori aggregation procedure to reduce model size in MIP mine planning models". *Electronic Notes in Discrete Mathematics*, 30, 297-302, 2008.
31. Weintraub A. "Integer Programming in Forestry". *Annals of Operations Research* 149(1): 209-216, 2007.
32. Duran G., Guajardo M., Miranda J. Sauré D., Souyris S., Weintraub, A., "Scheduling the Chilean Soccer League by Integer Programming". *Interfaces* 37(6): 539-552, 2007. (see also Erratum *Interfaces* 38(3): 221-221, 2008.)
33. Palma C., Cui W., Martell D., Robak D., Weintraub, A., "Assessing the impact of stand-level harvests on the flammability of forest landscapes", *International Journal of Wildland Fire* 16(5): 584-592, 2007.
34. Vielma J.P., Murray A., Ryan D., and Weintraub, A., "Improving computational capabilities for addressing volume constraints in forest harvest scheduling problems", *European Journal of Operational Research* 176(2): 1246-1264, 2007.

35. Díaz Legües A., Jacques A. Ferland, Celso C. Ribeiro, Jorge R. Vera and Andrés Weintraub, "A tabu search approach for solving a difficult forest harvesting machine location problem". *European Journal of Operational Research* 179(3): 788-805, 2007.
36. Henig, M. I., & Weintraub, A. "A dynamic objective-subjective structure for forest management focusing on environmental issues". *Journal of Multi-Criteria Decision Analysis*, 14(1-3), 55-65, 2006.
37. Epstein R, Weintraub, A, Sapunar P, et al. "A combinatorial heuristic approach for solving real- size machinery location and road design problems in forestry planning". *Operations Research* 54(6): 1017-1027, 2006.
38. Weintraub, A., Romero C. "Operations research models and the management of agricultural and forestry resources: A review and comparison". *Interfaces* 36(5): 446-457, 2006.
39. Weintraub, A. and Murray A., "Review of combinatorial problems induced by spatial forest harvesting planning". *Discrete Applied Mathematics* 154(5): 867-879, 2006.
40. Goycoolea M., Epstein R., Weintraub, A., Murray A., Barahona F., "Harvest Sheduling Subject to Maximum Area Restrictions: Exploring Exact Approaches", *Operations Research* 53(3): 490-500, 2005.
41. Bjorndal T., Lane D., and Weintraub, A. "Operational Research Models and the Management of Fisherties and Aquaculture: A Review". *European Journal of Operational Research* 156(3): 533-540, 2005.33. Caro F., Shirabe T., Guignard M. and Weintraub, A., "School redistricting embedding GIS tools with integer programming". *Journal of Operational Research Society* 55:836-849, 2004.
42. Murray, A.T., Goycoolea M. and Weintraub, A. "Incorporating average and maximum area restrictions in harvest scheduling models." *Canadian Journal of Forest Research*, 34: 456-464, 2004.

43. Caro F., Andalaft R., Weintraub, A., Sapunar P., Cabello M., "Evaluating the Economic Cost of Environmental Measures in Plantation Harvesting through the Use of Mathematical Models", *Production and Operations Management* 12(3): 290-306, 2003.
44. Andalaft N., Andalaft P., Guignard M., Adrian Magendzo, Alexis Wainer, Andres Weintraub. "A Problem of Forest Harvesting and Road Building Solved Through Model Strengthening and Lagrangean Relaxation", *Operations Research* 51(4): 613-628, 2003.
45. Caro F., Constantino M., Martins I. and Weintraub, A. A 2 Opt Tabu Search Procedure for the Multi-Period Forest Harvesting Problem with Adjacency, Green-up, Old Growth and Even Flow Constraints", *Forest Science* 49(5): 738-751, 2003.
46. Vera, J., Weintraub, A., Koenig, M. Bravo G., Guignard M., Barahona F., 2003. "A Lagrangian Relaxation Approach for a Machinery Location Problem in Forest Harvesting". *Pesquisa Operacional* 23(1): 11-128, 2003.
47. Murray A., Weintraub, A. "Scale and Unit Specification Influences in Harvest Scheduling with Maximum Area Restrictions". *Forest Science* 48(4): 779-789, 2002.
48. Weintraub A, Guignard M, Church, R and A Murray "Forest Management Models and combinatorial Algorithms: Analysis of State of the Art", *Annals of Operation Research* 96: 41-66, 2000.
49. Weintraub A., Epstein, R., Murphy G., Manley B. "The Impact of Environmental Constraints on Short Term Harvesting: Use Planning Tools and Mathematical Models". *Annals of Operations Research* 96: 271-285, 2000.
50. Epstein, R., Nieto, E., Weintraub, A., Chevalier, P., & Gabarró, J. "A System for Short Term Harvesting Strategy", *European Journal of Operations Research* 119: 427-439, 1999.
51. Weintraub A., Murray A., Church R., "Operational Forest Planning and Steiner Tree Extension", *Geographical Systems* 5: 221-237, 1999.

52. Epstein, R., Morales, R., Serón, J., Weintraub, A. "Use of OR Systems in the Chilean Forest Industries", *Interfaces* 29: 7-29. 1999.
53. Weintraub, A., Aboud J., Fernandez C., Laporte G., Ramirez E., "An Emergency Vehicle Dispatching System for An Electric Utility in Chile". *Journal of the Operational Research Society* 50: 690-696, 1999.
54. Church R., Murray, A., Weintraub, A., "Locational Issues in Forest Management", *Locational Science* 6: 137-153, 1998.
55. Martell, D., Gunn E., Weintraub, A., "Forest Management Challenges for Operational Researchers". *European Journal of Operations Research* 104(1): 1-17,1998.
56. Equi, L., Gallo, G. Marziale S., Weintraub, A., "A Combined Transportation and Scheduling Problem." *European Journal of Operations Research* 97(1): 94-104, 1997.
57. Weintraub, A., Saez G., Yadlin M., "Aggregation Procedures in Forest Management Planning Using Cluster Analysis". *Forest Science* 43(2): 274-284, 1997.
58. Weintraub A. and Bare Bruce. "New Issues in Forest Management from an Operations Research Perspectives", *Interfaces* 26(5): 9-25, 1996.
59. Weintraub A., Epstein R., Morales R., Serón J. and Traverso P. "A Truck Scheduling System Improves Efficiency in the Forest Industries" *Interfaces* 26(4): 1-12, 1996.
60. Weintraub, A., Jones, G., Meacham, M. Magendzo M., Magendzo, A., Malchuk, D. "Heuristic Procedures for Solving Mixed-Integer Harvest Scheduling Transportation Planning Models". *Canadian Journal of Forest Research* 25:1618-1626, 1995.

61. Weintraub, A. and Abramovich, A. "Analysis of Uncertainty of Future Timber Yields in Forest Management", *Forest Science* 41(2): 217-234, 1995.
62. Weintraub, A., Jones, G., Magendzo, A. Meacham, M. Kirby M. "Heuristic System to Solve Mixed Integer Forest Planning Models", *Operations Research* 42(6): 1010-1024, 1994.
63. Weintraub, A., Barahona, F. and Epstein, R. "A Column Generation Algorithm for Solving General Forest Planning Problems with Adjacency Constraints", *Forest Science* 40: 142-161, 1994.
64. Weintraub, A., Barahona, F., J.C. Rozas, Muñoz, E. "Solving Multicommodity Flow Problems", *Investigación Operativa* 3: 201-213, 1993.
65. Fernandez E., Marcotte P., Mondschein S., Vera J and Weintraub, A. "Solution Approaches to the Bus Operator Problem". *Transportation Research Part B: Methodological* 27(1): 1-11, 1993.
66. Barahona F., Weintraub, A. and Epstein R., "Habitat Dispersion in Forest Planning and Stable Set Problem". *Operations Research* 40(1): S14-S21, 1992.
67. Weintraub A. and Cholacky A. "A Hierarchical Approach to Forest Planning". *Forest Science* 39(5): 439-460, 1991.
68. Weintraub A. and J. Vera "A Cutting Plane Approach for Chance Constrained Linear Programs". *Operations Research* 39(5): 776-785, 1991.
69. Rensi G. and Weintraub, A. "Using Dynamic Programming to Determine Efficient Kiln-Drying Schedules". *Wood and Fiber Science* 20: 215-225, 1988.
70. Barros O. and Weintraub, A. "Spatial Market Equilibrium Problems as Network Models". *Discrete Applied Mathematics* 13: 109-130, 1986.

71. Weintraub A., Kohn V. and Guitart S. "Strategic Planning in Forest Industries". European Journal of Operations Research 24(1): 152-168, 1986.
72. Weintraub A., Ortiz C. and González J. "Accelerating Convergence of the Frank-Wolfe Algorithm", Transportation Research 19(2): 113-122, 1985.
73. Barros O. and Weintraub, A. "Planning for Vertically Integrated Forest Industries" Operations Research 30(5): 1168-1182, 1982.
74. Weintraub A. and Ingram W. "An Efficient Approach to Some Cases of Coefficient Variations in Linear Programs". Operations Research 29(3): 609-611, 1981.
75. Weintraub, A. and González J. "An Algorithm for the Traffic Assignment Problem". Networks 10: 197-209, 1980.
76. Weintraub A. and Navon D. "A Forest Management Planning Model Integrating Silvicultural and Transportation Activities", Management Science 22(12): 1299-1309, 1976.
77. Weintraub, A. "A Primal Algorithm to Solve Network Flow Problems with Convex Costs", Management Sciences 21(1): 87-97, 1974.
78. Weintraub, A. "The Shortest and K-Shortest Routes as Assignment Problems", Networks 3: 61-73, 1973.