



Development Ideals

Design for Human Ecosystems by John Tillman Lyle; Van Nostrand Reinhold; New York, N.Y.; 1985; 269 pages; \$39.95 hardcover.

When I left California for New England many years ago the public was on the verge of a major debate over development of the state's lengthy and scenic coastline. Opinion was polarized between the environmentalists who cried for *no* development, and the developers who seemed to want to turn the edge of the Pacific into suburbia. There seemed to be little middle ground, despite the well-publicized — but only partially successful — example of *Sea Ranch*, an ecologically designed development north of San Francisco.

The question, it seems to me, is not whether to develop or not, but how to create a built environment that is ecologically sound. This is the problem addressed by landscape architect and professor John Tillman Lyle in *Design for Human Ecosystems*. In it he discusses broad principles, methods, and techniques for land planning and natural resource use that

he says "can make human ecosystems function in the sustainable ways of natural ecosystems." Each topic is illustrated by case studies (28 in all) ranging from the Simon Residence in Riverside, Calif., to a regional plan for protecting the rain forests of Huetar Atlantica in Costa Rica.

Lyle's first example is taken from a study he and his students did for development at San Elijo Lagoon, a system of marshes and mudflats that open into the Pacific Ocean north of San Diego. Over the years the area had been changed from a natural tidal lagoon to a hazardous area through the construction of sewage treatment ponds for nearby residential areas. A proposed marina development occasioned heated controversy.

On one side environmentalists, with zoning regulations on their side, claimed that the marina plan would destroy a sensitive wetlands bird habitat. The developers argued private

property rights, increased tax base, housing needs, and of course, profit. When a stalemate emerged, Lyle and his group were called in.

After considerable study the planners concluded that whether the lagoon was left alone or developed into a marina subdivision, it would still become an environmental liability. They maintained that oversimplified focus on either single aim would hurt the diversity and stability required for the lagoon. A public opinion survey revealed that keeping a natural appearing—not necessarily undisturbed—tidal marsh area was important to local residents, while a marina was a low priority. Moreover, the researchers found that tidal marshes are perhaps the world's most efficient food producing systems (about seven times as effective as a wheat field), thereby having potential economic value. They also determined that a healthy lagoon had recreation—and therefore economic—value and could actually be used as part of a biological sewage treatment process for surrounding communities.

Lyle's group prepared suitability maps which analyzed specific areas of the site for different uses. They considered several alternatives and proposed a plan that included a mix of administrative and research facilities, biotic production and conservation areas, perimeter trails and buffer zones, wildlife preservation, intensive recreation and commercial activities, erosion control measures for neighboring areas, and selective urban development that included both high density and large lot residential construction. Development according to this plan would create economic benefits, restore tidal flushing, re-establish marsh grasses, and expand the food web in the lagoon's ecosystem. A harmonious, and presumably sustainable balance would result. The key was planning with an ecologically informed and diversified viewpoint.

The three major sections of *Design for Human Ecosystems* elaborate and expand on this theme. The first outlines the scales of concern—ranging from small sites to regional, subcontinental, and even global planning.

Part Two focuses on the design process—from initial research through to creation of a final plan. Different technical models are reviewed, from rational economic planning to simply "muddling through" (solving one problem at a time).

As might be expected, Lyle also believes ethics are important. He describes planners as varying from the goal planner (or "hired gun") who plans only to implement the client's objectives, to so-called objective and ideal planners who draw more stringent ethical distinctions, to the environmental advocate.

Part Three explores the "ecological order," including the role of plants and animals, the importance of controlling material and energy flow, and questions of ecological patterns, landscape suitability and impact prediction. In general, Lyle writes from a broad perspective, rather than focusing on solving particular landscape or resource management problems. These are addressed indirectly through the case studies. He concludes that good planning requires checks, balances, complexity, feedback, and a capacity for adaptive change. He admits that no specific

planning method is perfect, but argues that we are now learning how to design in a responsible way, and that we have reached the point "where we know what we are trying to do." An extensive bibliography is included.

I found this book both inspiring and informative. Landscape architects and Town or City planners will probably get the most from this book, but it also has much to say to real estate agents, developers, builders, architects, and ordinary citizens who want to understand and contribute to making our environment safe and sustainable.

—Paul Hanke

Development Realities

Land Development by NAHB Staff; National Association of Homebuilders; Washington, D.C.; 1987; 329 pages; \$26.25 paperback (\$21 NAHB members).

If *Design for Human Ecosystems* provides a vision of the possible in land use planning, *Land Development* offers a nuts-and-bolts overview of the practical aspects of land development. Its easy reading text and abundance of charts, graphs, tables, and illustrations will introduce readers to all the major issues involved in acquisition and development of a site, and make you aware of the choices available for solving problems from market surveys to street design.

Ten chapters cover market research, feasibility studies, pre-and post-purchase site analysis coping with land use regulations, obtaining permits, financing, housing types, storm water management, street design, energy conservation, and other essential questions facing today's developer. While none of the discussion will make you an expert on any of these subjects, you will probably come away with sufficient information to deal more effectively with the issues and work with design consultants and officials. While some subjects are treated quite generally (for example, a "checklist" format is used for the section on market research), other chapters get right down to the specifics of cul-de-sac and curb design.

Extensive references, case studies, and appendices describing market segments (25 in all) and two sample market survey questionnaires supplement the text. A comprehensive and understandable overview of a complex subject.

—Paul Hanke

Free & Cheap

Urban Land Use Resource: The Urban Land Institute offers a 72-page catalog of its publication on all facets of urban land use planning and development—including such topics as housing supply, affordability, environment, financing, infrastructure, and mixed-use development. In addition, the Institute sponsors seminars and rents films on subjects of interest to urban developers, both residential and commercial. For a free copy of the catalog write ULI, Publication Orders Dept., 1090 Vermont Avenue, N.W., Washington, D.C. 20005; 202/289-3381.

Community Design: An informative analysis of changing market trends, government attitudes, and possible builder responses to land use planning is available from NAHB. The 49-page paperback offers advice to builders on how to cope with the current situation, and is supplemented by graphics. *Community Design Guidelines* costs \$13.75 (\$11 to NAHB members). Order from NAHB Publication Service, 15th and M Streets, N.W., Washington, D.C. 20005; or call 800/368-5242.

Fencing Techniques: A set of plans showing how to build five different fences has been published by Western Wood Product Association. Called *Plan Sheet 25*, the publication shows the builder how to determine the fence line, how to set posts and then how to build traditional, designer, contemporary, timbered, and horizontally sided fences. Also shows how to make four decorative post tops. Single copies are available free from Western Wood Products Association, Dept P-125, Yeon Building, 522 S.W. Fifth Ave., Portland, OR 97204.

Brick Information: The 1987-1988 Catalog from the National Association of Brick Distributors offers marketing tools, publications, brick projects, and specialty items. For a free copy of the catalog, write to NABD, 100 Duke St., Alexandria, VA 22314; 703/549-2555.

Southern Lumber: The 1988 *Buyer's Guide* of the Southern Forest Product Association lists SFPA member mills, associate members and their services, and affiliate members' treated lumber and laminated products. This 40-page guide also lists products, capacities, equipment and provides contact information. For a free copy, write to SFPA, P.O. Box 52468, New Orleans, LA 70152; 504/443-4464.

Independent Handles: Desipro's (*Design in Progress*) line of door handles especially developed to allow the disabled to operate door and window handles independently, despite any hand grip dysfunctions, is described in a new product brochure. For a free copy, contact Valli & Colombo, Inc. at 800/423-7161 or 813/359-2569, P.O. Box 245-1540 Highland Ave., Duarte, CA 91010.

Foam Sheathing Product Information: A six-page brochure describes Celotex's line of foam sheathings, including those suited for polymer stucco exterior finishes and for insulating unheated garages. The brochure supplies R-values, sizes and fire performance information. For a free copy of Celotex's Building Division, P.O. Box 31602, Tampa, FL 33631; 813/871-4811.

Vinyl Windows: The Poly-Tex Company describes the features and advantages of Customweld, a new product in their Custom Gard line of vinyl replacement windows. This four-page brochure is available free by writing to Poly-Tex Company, 565 Cedar Way, Oakmont, PA 15139; 412/826-8077.

Power Tool Catalog: The Kett Tool Company's catalog describes their full line of electric and pneumatic power tools. For a free copy, write the company at 5055 Madison Rd., Cincinnati, OH 45227; 513/271-0333.

Metal Framing: PPG Industries has published *Metal Framing Systems 1988 (G-8040)* which describes fixed window framing systems, storefront and entrance systems, curtain wall systems and structural silicone glazing systems. This 11-page brochure can be ordered free by writing to PPG at 15 Benton Drive, East Longmeadow, MA 01028; 413/525-3666.

Exterior Insulation: A four-page brochure describes the uses, advantages, components, and application techniques of the ThoroWall A exterior insulation and finish system. The system is a flexible acrylic, polymer based insulated wall system. For a free copy of this brochure, write to Thoro System Products, ThoroWall Division, 7800 N.W. 38th St.,

Woodworking Trends: Monthly issues of *Trend-lines*, the woodworking catalog of tools, supplies, publications, and specialty items are available free. Call 800/343-3248 or write to Trend-lines, Inc., Woodworking Supplies, 375 Beacham St., P.O. Box 6447, Chelsea, MA 02150.