and implementation took the form of "adaptive strategies."[28] Much to the frustration of McHarg and his partners, the firm was not hired to produce ecological designs for individual developments within the new town. Though many aspects of the plan were innovative, and though the new community seems to have been a financial success, in many respects the design of the new community failed both aesthetically and environmentally. Plans alone do not ensure that goals are achieved, as they may be subverted by inconsistent landscape design and management.

By the early 1970s, McHarg was widely recognized as a successful ecological planner, but, as at Woodlands, he had been unable to expand his practice from the domain of planning into that of design. Clients tend to hire professionals who have successfully completed commissions similar to the one they are contemplating; thus McHarg continued to attract challenging environmental planning projects but, with one exception, failed to gain design commissions. Perhaps it was this frustration at the lack of opportunity to implement ideas in built form that prompted McHarg to champion and persist with a project in Iran despite his partners' misgivings and objections.

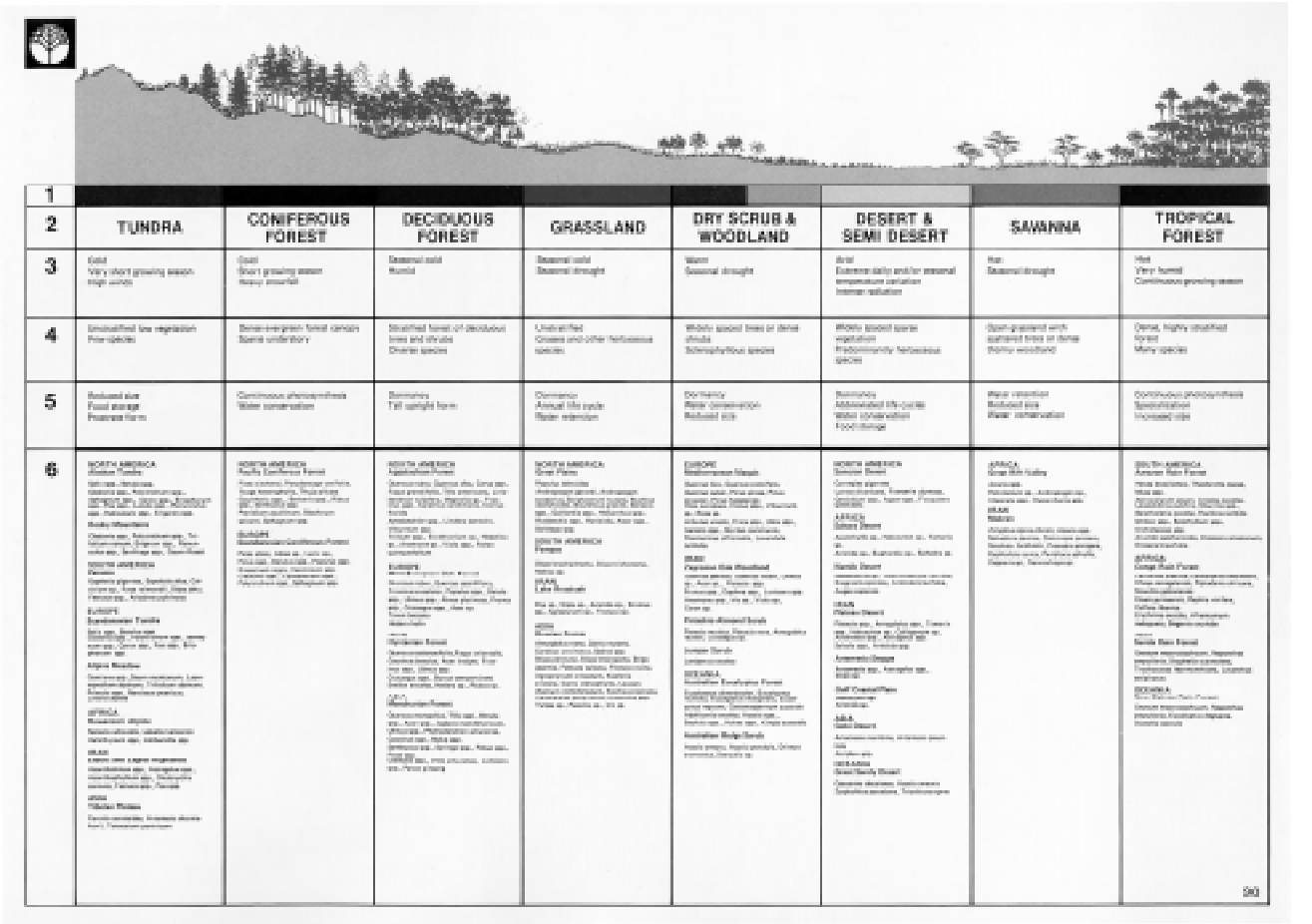
Pardisan was to be an environmental park outside Tehran—a botanical garden, zoo, and cultural history museum, all in one, in a very arid region. It was both professionally risky, given the turbulent political conditions in the Middle East, and open to intellectual challenge, given its apparent contradictions in relation to McHarg's own work. After the oil embargo of 1973 and OPEC's oil price hike in 1975 provided many OPEC countries with ample income and slowed the American economy, particularly new construction, many American architectural and planning offices started working for Middle Eastern clients. McHarg's partners were reluctant to undertake such projects and the financial commitments to open offices abroad that they entailed. In order to proceed, McHarg agreed to be personally responsible for the financial risk.

WMRT had produced a feasibility study for Pardisan in 1973 and published a master plan in 1975.[29] The client for the project was Iran's Department of Education; the park's theme was to illustrate the idea of evolution. The proposal was to exhibit all types of the worlds' biomes—from tundra to tropical forest—with their diversity across continents, as expressions of adaptive responses on the part of plants and animals (both species and communities) and human cultures to environmental conditions (Fig. 8). The exhibits would consist of animals and plant communities displayed as one would encounter them in their native habitat, with many examples of the same species. Though it is now common to have zoo exhibits of animals in habitats much like their native habitat and in social groups akin in size to those they might inhabit in the wild,[30] this was not so in the mid-1970s. The plan for Pardisan broke new ground.

[28] In 1970–71 Robert Hanna taught Form, a drawing course that emphasized the adaptive fit between form and natural and cultural processes. Anthropologists Yehudi Cohen and Setha Low, who taught landscape architects at Penn, were also influential. Cohen wrote about cultural processes as environmental adaptation, and Low led students and faculty to consider the relationship between the environment and human health.

[29] *Pardisan* (Philadelphia: Wallace McHarg Roberts and Todd, 1975).

[30] San Diego Zoo's wild animal park and the Arizona-Sonoran Desert Museum were models.



8. Program for vegetation exhibits at Pardisan, organized by bio-climatic zone (2) and showing, for each, 1) relative water demand; 3) description of zone; 4) characteristics of plant community; 5) major adaptive strategies; 6) the vegetation exhibits and their constituent species. Programs for the exhibits of animals and human cultures are developed and presented in a similar, parallel format, which highlights environmental stresses, adaptive strategies, and the relationships among plant, animal, and human communities. (from Pardisan *[Philadelphia: Wallace McHarg Roberts and Todd, 1975])*

But innovation could not conceal a larger issue: however ambitious the project's scope and didactic goals, it was, in many ways, ecologically and socially perverse. All but some of the desert exhibits required irrigation, and the boreal and tropical forests needed to be in huge greenhouses, the boreal forest in an air-conditioned one. The human inhabitants of the park—those who were to live in the cultural exhibits and those who were visitors—raised further ethical and political issues. While Pardisan may have been *about* ecology, it certainly seemed at odds with McHarg's earlier work in ecological planning. Work on the design for Pardisan intensified in 1977 when Wallace McHarg Roberts and Todd opened an