

A Wilderness-Based Checklist for Design and Construction

Be certain that the project

1. *Creates pure air.* First of all, stop dumping the products of combustion into my sky. Then plant every possible outdoor inch with native trees, shrubs, vines, and grasses. Or, better yet, let it all go wild; let natural selection handle the design. Deep mulch, and peace, are all that are needed in most parts of the United States. Left alone, under a protective, moisture-holding layer, the earth will usually spring back to life again. There's no better way to create oxygen, to absorb CO₂, or to filter smoky air. Tight little dot-dot-dot landscapes (featuring exotic plants that require constant watering and fertilizer) are wasteful, expensive, and inappropriate.

2. *Creates pure water.* Everything above applies here with equal force. Life values can't be separated into unrelated categories. In addition to giving plants their freedom, however, vast improvements must be made in our attitudes toward rainwater. Many paved and roofed areas should of course be put underground. Short of that, the use of porous paving, percolation beds, and retention basins must become second nature. Remember that every storm drainage pipe is the admission of a failure somewhere upstream and that lawn mowers, insecticides, and weed-killers work directly against the life force.

3. *Stores rainwater.* The best place to store rainwater is in the earth. If the soil where you live is impervious to water it's all the more important to hold the rain in deep surface layers of mulch, releasing it slowly to the plants and to the watercourses it feeds.

4. *Produces its own food.* You may not be able to feed a whole family with the food grown directly on a small site, let alone on a rooftop, but homegrown food can't be beat, and a peach plucked fresh from a fourth-level rooftop orchard is bound to be far better than one that was trucked a thousand miles. Considering the world food crisis we should be raising food, and not shopping centers, on our best farmland.

5. *Creates rich soil.* Topsoil is alive; don't destroy it! A few bags of 5-10-5 are not the answer. Soil-building ground covers, earthworms, composted organic wastes, and mulch will restore ailing land to healthful life again. Sun power makes it happen.

6. *Uses solar energy.* We all use solar energy every day. Because of the sun, the coldest January day is far, far warmer than the -273 C of absolute zero. Wood, coal, oil, gas – even sugar – give us their stored sunlight on demand. But the burning of fuels turns the skies brown, and fuels have higher uses, anyway. Properly insulated buildings can often be heated by using nothing but sunlight.

7. *Stores solar energy.* When we start to use solar energy on a massive scale, the green world can once again begin laying up for the future more of the fossil treasures we have now virtually depleted. In order to use solar energy we must store it, whether overnight or over winter, as nature has learned to do. As the high-tech side of the solar industry gets more and more complicated the low-tech side gets simpler. You can imagine which side will require fewer expensive service calls.

8. *Creates silence.* Cities can be silent. Why isn't silence a basic human right? We seem to be able to tolerate anything, but look at us: a neurotic generation. Is there a connection? Dense plantings, soft surfaces, non-parallel walls, vibration eliminators, insulation, and machines located underground can give us utter peace and privacy, even in the busiest parts of town.

9. *Consumes its own wastes.* In wilderness, everything is and then *is* and then *isn't* and then *is* again. Now the city must work that magic, too. Ocean-dumping, "sanitary" landfills, sewage – shame on us! It's not only the poisoning of the world, it's the *waste!* Have you ever done a survey of total wastes and resources for a building you were about to build? If you have, you are most rare. Do it; there are ways, right now, to capture and reuse almost every resource that goes into a building – or into its occupants.

10. *Maintains itself.* Sunlight, water, and ice, not to mention smoky skies, are rough on building materials. Protect exposed surfaces in every way possible. Redwood ages gracefully, and aluminum holds up well (away from salt air), but consider their other costs: stump-covered mountainsides and huge power waste. Building with dead materials as we do, we're forced to compromise, so compromise well. Underground buildings are ideal in this regard, hiding their skins from the damaging elements. Mowing, repainting, and reroofing can almost be forgotten when earth architecture is the theme.

A Wilderness-Based Checklist for Design and Construction (cont'd)

11. *Matches nature's pace.* Our twenty-year cycles of construction bear no relation to life's grand, century-by-century pace. We must move toward the use of permanent architectural shells within which we can make our restless changes without damaging the land around or above them. The rhythm of the seasons is part of our heritage whether we like it or not. The current way of dealing with it is to fight, but that's one fight we cannot win.

12. *Provides wildlife habitat.* Let the old first families move back into town. Whole communities of wildlife – the kind we now expect to see only in zoos – will return and set up housekeeping at our doorsteps once we get the asphalt out of our blood. Wild creatures don't have to be invited twice; provide the right habitat and they'll appear as if by magic.

13. *Provides human habitat.* This has been almost the only goal of architecture for centuries. A wider view of the world now seems to be in order.

14. *Moderates climate and weather.* Nothing tames storms like living plant growth. In the forest, a gale is only a sound in the treetops. Under-ground, a cold wave is unknown. Dense groves of maintenance-free plants (all right: weeds, if that's what you want to call them!) above an underground parking lot will shelter the asphalt, moderating its temperature extremes until we learn to do better. Mounds and ponds will further temper the gales that paving and city canyons breed.

15. . . . *and is beautiful.* When architecture draws its lessons from the wild, beauty will no longer have to be applied. That's an empty exercise. Organic rightness – appropriateness – will repair the broken connection between architecture and its roots.

(Excerpted from *Gentle Architecture* by Malcolm Wells, 1981, McGraw-Hill)