paper or plastic bags at the grocery store, if the windows on envelopes are recyclable or should be torn out—didn't even factor into the calculations. The footprint focuses on the decisions with the biggest impact, not necessarily those looming largest in the popular imagination. "A recycled can is about 80 percent more efficient than a nonrecycled can, but compared to all the other energy use in your life, the can doesn't make that much difference," says Gelobter. In the quiz, an avid recycler gets only a slight acreage reduction for all that aluminum and glass, while a vegan who grows her own food, never travels by plane or car, and lives in a 500-square-foot green-design home with her sweetheart enjoys a laudable ecological footprint of 3.

This same discrepancy between actions perceived as important and those that really matter spurred Michael Brower and Warren Leon to write *The Consumer's Guide to Effective Environmental Choices*, a book that aims to put green decision-making in perspective. "Everyone felt a little bad if they didn't recycle, but they saw nothing wrong with having three cars," Brower says.

After the quiz, I resolved to lose a shoe size or two, but how? Plane trips are my biggest environmental crime—I spent at least 50 hours flying last year—but I can't skip visiting my sister and her new baby. The apartment's going to stay the same size for the time being. The months I spent as a vegetarian were the hungriest I've ever been. Vegan? Forget it.

Luckily, the quiz lets you bargain. Driving in the city is a recipe for frustration and the train is packed in the mornings—I can walk the three miles to work more often with little sacrifice. And maybe I'll pick up some compact fluorescent bulbs on the way. Making sure at least 50 percent of my food is locally grown and unprocessed shouldn't be too difficult. With all that though, I save only three-fourths of an acre. It's far from sustainable.

But there are other ways to work

HOW TO LOSE A SHOE SIZE

Is your ecological footprint a tad ungainly? Does your lifestyle require more acres of the earth's surface than seems fair? Even small efforts—biking to school or eating pasta instead of a hamburger—can make a difference if you do them regularly. But individual action, even by the most noble, probably isn't going to get the U.S. average down to the sustainable 4.5 acres per person. Many people live in suburbs with no sidewalks or in cities without access to locally grown food. Broader efforts to cut back sprawl and promote energy conservation are just as important as personal economies.

▶ **TAKE ACTION** *To work toward a sustainable future, go to the Sierra Club's Web site at www.sierraclub.org/footprint. One section offers a list of ways to shrink your ecological footprint. Tell us what changes you're going to make, and we'll add your contribution to a grand tally of acres saved. A second section invites you to become a member of the Sierra Club's activist network. It's one good way for busy people to work for changes that will reduce everyone's footprint. —K.T.*

Measure Your

HOW MANY ACRES does it take to support your lifestyle? You're about to find out. The Ecological Footprint Quiz estimates the productive land and water required for the resources you consume. This is a simplified version of the quiz designed by Redefining Progress. While not flexible enough to adjust for all situations, the quiz is a useful gauge. It focuses only on individual impact, however, and does not measure the effects of childbearing decisions. For more on the population question and the complete quiz online go to *www.MyFootprint.org*.

INSTRUCTIONS

1. Circle your response.
2. Calculate the footprint for each section.
3. Enter footprint totals in the quiz results section.
4. Calculate your total footprint.

FOOD

1. How often do you eat animal-based foods (beef, pork, poultry, fish, eggs, dairy)?

a.) Never (vegan)	0.46
b.) Infrequently (no meat; eggs/dairy a few times a week)	0.59
c.) Occasionally (no meat or infrequent meat; eggs/dairy almost daily)	0.73
d.) Often (meat once or twice a week)	0.86
e.) Very often (meat daily)	1.0
f.) Almost always (meat and eggs/dairy in almost every meal)	1.14

2. How much of your food is processed, packaged, or not locally grown? ("Locally grown" means less than 200 miles away. If your apple is from a farmers' market, odds are it's locally grown. If the fruit is from a supermarket, odds are it's not.)

a.) Most	1.1
b.) Three-quarters	1.0
c.) Half	0.9
d.) One-quarter	0.79
e.) Very little	0.69

Multiply your answer to question 1 by your answer to question 2 by 5.5.

$$Q1 \times Q2 \times 5.5 = \boxed{} \text{ acres}$$

FOOD FOOTPRINT

Footprint

SHELTER

3. What is the size of your home? (The average house in the United States is 1,700 square feet.)

a.) 2,500 square feet or larger	1.9
b.) 1,900–2,500 square feet	1.5
c.) 1,500–1,900 square feet	1.3
d.) 1,000–1,500 square feet	0.9
e.) 500–1,000 square feet	0.6
f.) 500 square feet or smaller	0.3

4. Which describes your home?

a.) Free-standing house	1.0
b.) Multistory apartment building	0.8
c.) Green-design home	0.5

5. Do you use energy conservation and efficiency measures throughout your home?

a.) Yes	0.75
b.) No	1.0

6. How many people live in your household, counting you?

a.) One	1.0
b.) Two	2.0
c.) Three	3.0
d.) Four	4.0
e.) Five	5.0
f.) Six	6.0
g.) Seven or more	7.0

Multiply answer to question 3 by answer to question 4 by answer to question 5 by 13.26. Then divide by answer to question 6:

Q3 x Q4 x Q5 x 13.26 ÷ Q6 = ☐ acres
SHELTER FOOTPRINT

MOBILITY

7. On average, how many miles do you travel on public transportation each week (bus, train, subway, or ferry)?

a.) 200 or more	0.86
b.) 75–200	0.42
c.) 25–75	0.15
d.) 1–25	0.04
e.) 0	0

Enter the circled number in this subtotal box:
PUBLIC TRANSIT FOOTPRINT SUBTOTAL = ☐ acres

8. On average, how many miles do you travel each week in a car (as a driver or a passenger)?

a.) 400 or more	1.91
b.) 300–400	1.43
c.) 200–300	1.0
d.) 100–200	0.55
e.) 10–100	0.12
f.) 0–10	0

(If f is your answer, skip the next two questions and enter 0 as your Car Footprint Subtotal below.)

9. How many miles per gallon does your car get? (If you don't own a car, estimate the average mpg of the cars you ride in.)

a.) More than 50	0.31
b.) 35–50	0.46
c.) 25–35	0.65
d.) 15–25	0.98
e.) Fewer than 15	1.54

10. How often do you ride in a car with someone else, rather than alone?

a.) Almost never	1.5
b.) Occasionally (about 25%)	1.0
c.) Often (about 50%)	0.75
d.) Very often (about 75%)	0.6
e.) Almost always	0.5

Multiply answer to question 8 by answer to question 9 by answer to question 10. Then multiply the product by 4:

Q8 x Q9 x Q10 x 4 = ☐ acres
CAR FOOTPRINT SUBTOTAL

11. Approximately how many hours do you spend flying each year?

a.) 100 (one coast-to-coast U.S. round-trip per month)	6.0
b.) 25 (two or three coast-to-coast U.S. round-trips per year)	1.5
c.) 10 (one coast-to-coast U.S. round-trip per year)	0.6
d.) 3	0.18
e.) 0	0

Enter circled number in subtotal box:
AIR TRAVEL FOOTPRINT SUBTOTAL = ☐ acres

Add the Public Transit, Car, and Air Travel subtotals and write your mobility subtotal in box:
MOBILITY FOOTPRINT = ☐ acres

GOODS FACTOR

12. Compared with people in your neighborhood, how much trash do you throw away?

a.) Much less	0.75
b.) About the same	1.0
c.) Much more	1.25

GOODS FACTOR = ☐ acres

QUIZ RESULTS

❶ FOOD FOOTPRINT = ☐ acres
❷ SHELTER FOOTPRINT = ☐ acres
❸ MOBILITY FOOTPRINT = ☐ acres
❹ GOODS FACTOR = ☐ acres
❺ SHELTER + MOBILITY = ☐ acres (Add ❷ + ❸)
❻ GOODS & SERVICES = ☐ acres (Multiply ❹ x ❺ x .9)

Add ❶ + ❷ + ❸ + ❻ = ☐ acres
YOUR TOTAL FOOTPRINT

ABOUT YOUR FOOTPRINT

The average ecological footprint in the United States is 24 acres per person. Your footprint measures ☐ percent of an average U.S. footprint (your footprint ÷ 24 x 100). Worldwide, there are 4.5 biologically productive acres per person. If everyone lived as you do, we would need ☐ planets. (Your footprint ÷ 4.5). NOTE: These numbers are based on world population today. Population growth will reduce resources available to each person in the future.

Canadians use 17 acres.
Italians, 9.
Pakistan...

Learn Where Your Energy Is Going.

It pays to know where your energy dollars are going. This chart illustrates the operating cost per kilowatt-hour for common household appliances.

Hair Dryer:
1¢/5-min use

Portable Heater:
9¢-18¢/hr

Digital Clock:
negligible

Waterbed Heater:
$10-$14/mo

Light Bulb, 100 watts:
1¢/hr

Color TV:
2¢/hr

VCR:
Less than 1¢/hr

Radio/Stereo:
Less than 1¢/hr

Refrigerator/Freezer:
•Frost free: 16 cubic feet $12-$18/mo
  20 cubic feet $13-$21/mo
•Manual defrost: 10 cubic feet: $4-$8/mo

Microwave Oven:
15¢/hr

Rangetop Burner:
•Electric: 15¢/hr
•Gas: 4¢/hr

Toaster:
Less than 1¢/use

Toaster Oven:
6¢/hr

Dishwasher:
6¢-11¢/load
•Electricity for hot water: 35¢/load
•Gas for hot water: 11¢/load

Oven:
•Electric: 16¢/hr
•Gas: 6¢/hr

Battery Charger:
negligible

Furnace:
•Smaller homes: $16-$40/mo
•Larger homes: $40-$195/mo

Electric Central Heater:
•Smaller homes: $55-$107/mo
•Larger homes: $111-$390/mo

Water Heater:
•Electric $47-$70/mo
•Gas $12-$18/mo

Clothes Washer:
3¢/load

Dryer:
•Electric: 59¢/load
•Gas: 13¢/load

Electric Blanket:
6¢-12¢/night

Freezer:
$16-$20/mo

Vacuum Cleaner:
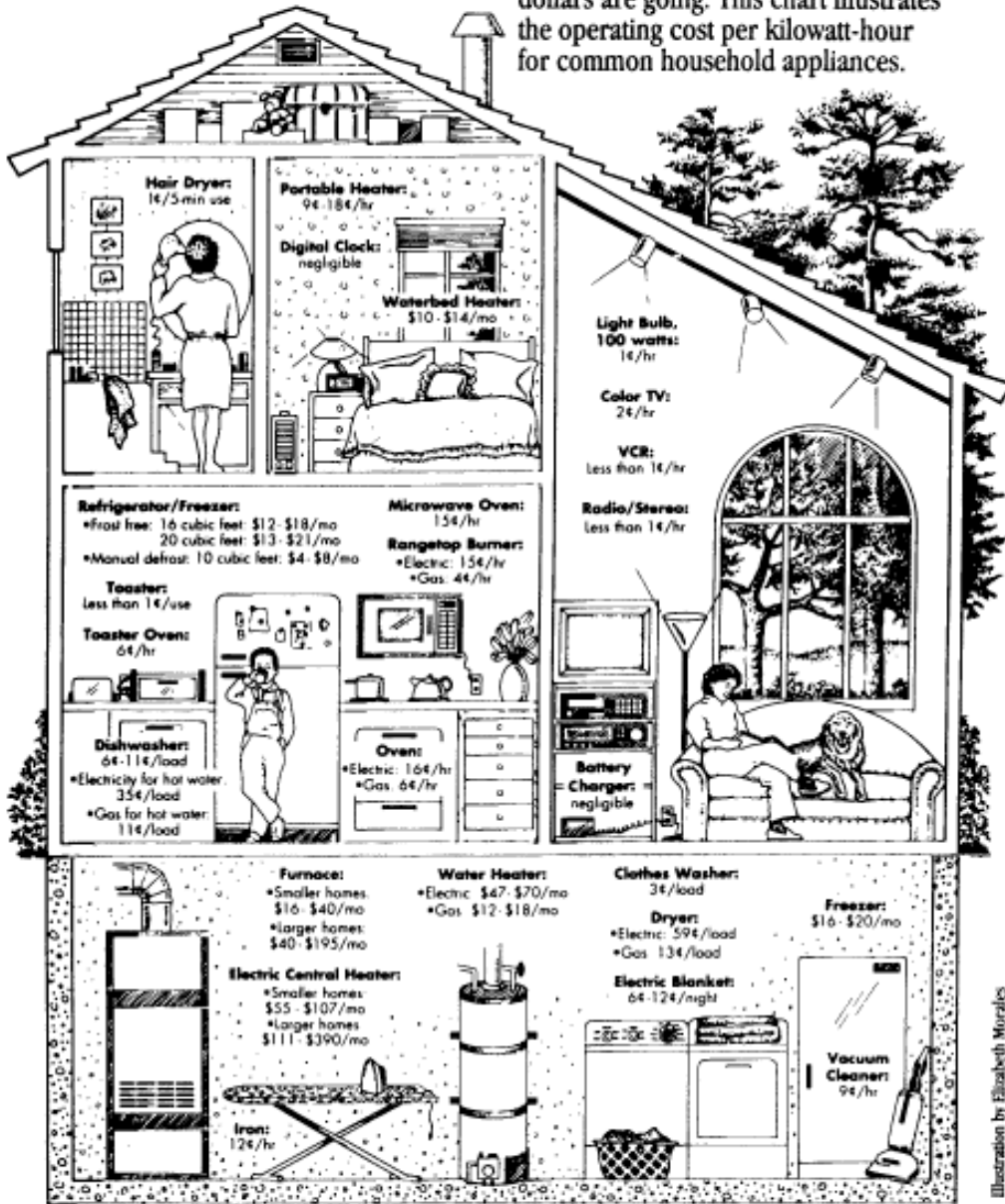9¢/hr

Iron:
12¢/hr

Illustration by Elizabeth Morales

Note: These are average figures. Costs may vary depending on your appliance model and usage.

Printed on recycled paper.

PG&E

03-3980

SMARTER ENERGY FOR A BETTER WORLD