

City of Davis Public Works Department

Environmental Guide



**Recycling, Bicycles,
Wildlife, Pollution Prevention,
Healthy Gardening, and more!**

www.CityOfDavis.org/pw/Recycle/Enviro_Guide

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CONTACT INFORMATION

Contact Information

All area codes are (530) unless noted otherwise.

For garbage/recycling schedules or pick-up questions

Davis Waste Removal (DWR) DWRco.com.....756-4646
2727 Second Street, Davis, CA 95618 (between Cantrill and Peña Drives)

For solid waste, recycling, composting or other questions

Public Works Department DavisRecycling.org.....757-5686
1717 Fifth Street, Davis, CA 95616
Email.....pwweb@cityofdavis.org

For billing information

City of Davis Finance Department.....757-5651
On-line payment.....CityOfDavis.org/Payment

For hazardous waste questions

Used motor oil and filter recycling RecycleUsedOil.com.....1-800-CLEAN-UP
Illegal dumping or a hazardous spill in progress.....911
Non-emergency questions on spills: (City of Davis Fire Department).....757-5684
Household Hazardous Waste Drop-off Days (Yolo County).....666-8729
Business-related hazardous material storage/disposal.....(866)-714-8470

UC Davis and DJUSD recycling programs

UC Davis Waste Reduction and Recycling Sustainability.UCDavis.edu.....752-7456
Davis RISE (Recycling Is Simply Elementary).....DavisFarmToSchool.org
Email.....info@davisfarmtoschool.org

For transportation questions

Traffic and Roadways757-5686
Bicycle and Pedestrian Program CityOfDavis.org/Bicycles.....757-5669
Street Smarts Program CityOfDavis.org/StreetSmarts.....757-5640

For wildlife and habitat concerns

General (Davis Public Works).....757-5686
Harassment or destruction of wildlife/habitat (CA Fish and Game).....1-888-334-2258
Sick or injured birds-of-prey (CA Raptor Center).....752-6091
Sick or injured bats (NorCal Bat Rescue).....902-1918
Other sick or injured animals (Wildlife Care Association).....916-965-9453
City Davis Stormwater & Pollution Prevention CityOfDavis.org/PW/Stormwater...757-5686
Our Water Our World (a pollution prevention program).....OurWaterOurWorld.org
City of Davis IPM Questions CityOfDavis.org/pgs/IPM.....757-5656x 7322
UC Davis Integrated Pest Management.....ipm.ucdavis.edu

Other useful phone numbers

Yolo County Central Landfill YoloCounty.org.....666-8729
44090 County Road 28H, Woodland, CA 95776
Yolo County Environmental Health.....666-8646
CalRecycle, Beverage Container Recycling.....1-800-RECYCLE
CA Dept. of Toxic Substances Control.....1-800-72TOXIC
US Environmental Protection Agency, Region 9, Solid Waste.....1-866-EPA-WEST
Earth 911 recycling and hazardous waste disposal information.....1-800-CLEAN-UP
Yolo-Solano Air Quality Management District ysaqmd.org.....757-3650
Central Valley Reg. Water Quality Control Board.....waterboards.ca.gov/centralvalley

RECYCLING IN DAVIS IS EASY!

These materials can be placed in the Davis Waste Removal recycling carts:

CONTAINERS



#1 - #7 PLASTICS

GLASS



STEEL, TIN AND ALUMINUM CANS,
FOIL AND LIDS

MIXED PAPER



MAGAZINES



MISC.
PAPER



CEREAL
BOXES



NEWSPAPER



JUNK MAIL



CARDBOARD

Flatten and stack next to recycling carts
(or place in cardboard bin, if present)

DO NOT PLACE TRASH IN THE RECYCLING CARTS!

WHAT CAN I PUT IN THE RECYCLING CART?

RECYCLING IN DAVIS IS EASY!

CONTAINERS

METAL CANS

- Cans must be empty
 - Paper labels are OK
 - ✓ aluminum cans
 - ✓ tin/steel cans
 - ✓ aluminum foil
 - ✓ empty aerosol cans
 - ✓ foil cake & pie pans
 - ✓ metal lids & caps
 - ✓ empty paint cans
- NO**
- ⊗ scrap metals—bring to DWR drop off facility at 2727 2nd St., open 24 hours a day)

GLASS

- Containers must be empty
 - Remove caps & lids, place in recycling cart
 - Paper labels are OK
 - ✓ food jars
 - ✓ beverage glass bottles
 - ✓ all colors are OK
- NO**
- ⊗ fluorescent bulbs/tubes
 - ⊗ window glass
 - ⊗ glass dish ware
 - ⊗ porcelain
 - ⊗ ceramic
 - ⊗ auto glass
 - ⊗ light bulbs
 - ⊗ mirrors

PLASTIC #1 - #7

- Containers must be empty
 - Remove caps & lids, place in recycling cart
 - Paper labels are OK
 - ✓ **all rigid plastic #1-#7 items** (look for the recycling symbols on the bottom of the product)
 - ✓ plastic lids & caps
 - ✓ storage containers
 - ✓ plastic food and beverage containers
 - ✓ plastic buckets
 - ✓ plastic flowerpots
 - ✓ plastic toys
 - ✓ other misc. rigid plastic items
- NO**
- ⊗ plastic bags
 - ⊗ plastic film & wrap
 - ⊗ expanded polystyrene (e.g. STYROFOAM™ Brand Foam, disposable foam food containers, etc.)
 - ⊗ electronics
 - ⊗ garden hoses & tires
 - ⊗ compostable "plastic" items (corn or potato starch, etc.)

MIXED PAPER

- Staples & glassine windows are OK
 - Remove paper clips & clasps
 - ✓ catalogs
 - ✓ cereal boxes
 - ✓ egg cartons
 - ✓ junk mail
 - ✓ magazines
 - ✓ multi-colored paper
 - ✓ newspaper
 - ✓ office and copy paper
 - ✓ paper bags
 - ✓ paper towel tubes
 - ✓ paperboard boxes
 - ✓ phone books
 - ✓ shoe boxes
 - ✓ receipts
- NO**
- ⊗ juice/milk cartons
 - ⊗ paper towels & tissues
 - ⊗ plastic & wax coated paper
 - ⊗ photos & blueprints
 - ⊗ mylar paper
 - ⊗ carbon & thermal fax paper

CARDBOARD

- Remove all packing materials: packing peanuts, expanded polystyrene (e.g. STYROFOAM™ Brand Foam, etc.)
 - Flatten large cardboard boxes and stack outside of the recycling cart
 - Place small cardboard pieces in the cart
- NO**
- ⊗ waxed cardboard
 - ⊗ packing materials
 - ⊗ un-flattened boxes
 - ⊗ pizza boxes with grease or food stuck to them

WHAT CAN I PUT IN THE RECYCLING CART?

HOUSEHOLD HAZARDOUS WASTE

Household Hazardous Waste

Products purchased by the general public that may pose a hazard to human health or the environment are known as household hazardous waste (HHW). Common items may be hazardous because they exhibit one or more of these properties:

toxic: poisonous when ingested, inhaled or touched

flammable: easy to ignite

corrosive: eats away materials by chemical action

reactive: creates an explosion or generates deadly vapors



Electronics

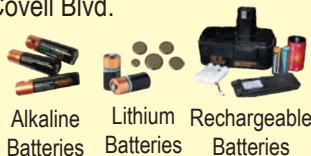
Televisions, computer monitors and microwaves are illegal to throw away in the trash. The Yolo County Central Landfill will accept these items for free every day during normal operating hours. Accepted items include: television & computer monitors, microwaves, cell phones, fax machines, printers, stereos, keyboards, vacuum cleaners, toasters, typewriters, VCRs, CPUs, CDs, DVDs, VHS tapes, cassette tapes, and more. There is a fee for appliances.



Batteries

Residents can recycle household batteries for free at these collection sites in Davis:

- CVS Pharmacy, 1550 E. Covell Blvd. and 1471 W. Covell Blvd.
- Davis Ace Hardware at 3rd & G Sts.
- Davis Senior Center, 646 A St.
- Hibbert Lumber, 500 G St.
- Rite Aid, 655 Russell Blvd., and 2135 Cowell Blvd.



Please sort all batteries by type (alkaline, lithium and rechargeable) into SEPARATE plastic bags BEFORE bringing them to be recycled.

Cell Phones

Cellular phones can be recycled at any cellular phone store. For locations where cell phones and rechargeable batteries are accepted, visit Call2Recycle.org.

Car Batteries

State law requires stores to accept your old car battery upon the purchase of a new battery. Car batteries can also be recycled for free at the Yolo County Central Landfill.

Used Motor Oil and Filters

Used motor oil and filters can be recycled for free at the sites listed below. Upon request, these sites will pay you 40¢ per gallon of used motor oil.

- Davisville Express Lube, 2014 Lyndell Terr., 753-7543
- Davis Waste Removal, 2727 Second St. (24 hours a day), 756-4646
- Jiffy Lube, 1625 Research Park Dr., 297-7080
- Kragen Auto Parts, 1681 Research Park Dr., 753-6755
- Speedee Oil Change and Tune-up, 2000 F St., 753-1633



Still not sure how to recycle something? Check out the City of Davis Recyclopeda at DavisRecycling.org.

HAZARDOUS WASTE

Free Household Hazardous Waste Drop-Off Events

Every Friday and Saturday 7:30 a.m. — 3:30 p.m.
at the Yolo County Central Landfill.

(for Yolo County residents only—no business waste)

Accepted items include:

- acids
- antifreeze
- automotive products
- brake/transmission fluid
- car and household batteries
- fire extinguishers
- floor and furniture cleaners
- fluorescent bulbs & tubes
- gasoline and other flammables
- household cleaners
- mercury thermostats
- mercury thermometers
- oil filters
- paint (oil and latex)
- pesticides and herbicides
- pharmaceuticals (non-controlled)
- poisons
- pool chemicals
- propane canisters
- solvents
- syringes
- used motor oil
- and more!



Senior and disabled residents who are unable to drive may call (866) 714-8470 to schedule a free pick up of their hazardous waste materials.

DOES YOUR BUSINESS GENERATE HAZARDOUS WASTE?

Federal and State laws require all businesses who generate, store or accumulate hazardous waste to comply with regulations for proper treatment, storage and disposal of these wastes. One such way is through participation in the Conditionally Exempt Small Quantity Generator (CESQG) program at the Yolo County Central Landfill.

To dispose of hazardous waste as a CESQG, follow these steps:

Step 1. Obtain an EPA ID #. Call the CA Dept. of Toxic Substances Control at 1-800-61-TOXIC or visit www.dtsc.ca.gov/IDmanifest. ID numbers are not required for businesses with universal waste only (batteries, fluorescent bulbs/tubes and other miscellaneous mercury-containing items).

Step 2. Call 1-866-714-8470 to make an appointment to drop-off the hazardous waste at the landfill. There is a fee based on the type and quantity of waste.

Visit YoloCounty.org for more information.

Pre-paid mailer programs: Another option is purchasing collection boxes for fluorescent tubes, bulbs, ballast or batteries. The boxes are sold at a fixed price, which includes shipping and disposal costs. Once you fill the box with batteries or fluorescents, they are mailed off for proper disposal. To find a pre-paid mailer program, type "recycle fluorescent" or "recycle batteries" in a browser search bar.



Still not sure how to recycle something? Check out the City of Davis Recyclopeda at DavisRecycling.org.

Scan the QR code to the left with your smart phone.
Data rates may apply.

YARD MATERIAL COLLECTION

OK

- grass clippings
- brush
- leaves
- prunings
- weeds
- discarded floral displays
- indoor plants
- Christmas trees
- branches less than 8" in diameter

NOT OK

- fruit & vegetables
- food scraps
- sod & soil
- pet waste
- concrete
- flowerpots
- florist's wire & foam
- stumps
- lumber
- branches more than 8" in diameter

Place yard materials loose (no bags) in piles at your curb. DWR collects yard materials once a week and will pick up yard material piles that are located immediately adjacent to a property. Do not place yard material piles across the street or around the corner from your property—they will not be picked up.

To make disposal of yard material easy for you and safe for others, please follow these guidelines:

- Place yard material on the street as close to your scheduled pick-up date as possible.
- Place yard material 18" from the curb or gutter. Do not put materials in storm drains.
- Do not park or drive over yard materials.
- Do not place yard materials in front of fire hydrants, driveways or storm drain inlets.
- **YARD MATERIAL PILES SHOULD NOT BE LARGER THAN 5' IN ANY DIRECTION.**
- **BIKE LANES SHOULD NEVER BE BLOCKED.** This may mean that your pile cannot be 5 feet wide if it obstructs the bike lane. Please be aware that yard material piles can cause cyclists to crash by slipping or getting branches stuck in their wheel spokes; due to their low profile and non-uniform size, cyclists may not see the piles until they come upon them, especially in the absence of street lighting.



Yard material placement—single-striped bike lane.



Yard material placement—double-striped bike lane.

For street sweeping, yard waste and curbside pick-up schedules, visit DavisRecycling.org.

Scan the QR code to the right with your smart phone.

Data rates may apply.



STREET SWEEPING

Streets are swept once a week, usually the day after yard material has been picked up. The downtown area receives street sweeping twice a week. **To maximize sweeping efforts, cars should be moved off the street and into driveways so that the areas near the curb can be cleaned.**

CURBSIDE RECYCLING

Curbside residential garbage and recycling collection is an automated dual cart system. The default sizes are one 95 gallon garbage cart and one 64 gallon split-recycling cart. Call Davis Waste Removal (DWR) at 756-4646 for a different size (35 or 65 gallon) or an additional trash container (extra charge will apply). An additional split-recycling cart is available upon request at no extra charge.



Curbside trash and recycling collection take place once a week.

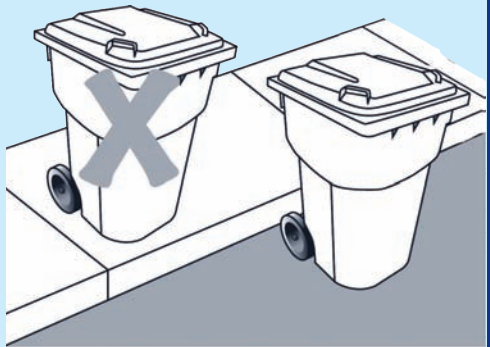
- Place the containers' wheels in the street, against the curb, with the cart opening facing the street no earlier than 5 p.m prior to pick-up day.
- **All trash and recycling must be inside the carts and the lids must close.**
- The carts should be 3 feet apart and at least 3 feet from parked vehicles.
- Keep yard waste piles, vehicles and other objects away from the front of the carts so that the trucks can reach them.
- Do not place your trash or recycling cart underneath portable basketball hoops—DWR trucks may not be able to empty your carts if they are placed underneath.
- Do not block the bike lane or sidewalk.

➔ **WHEELS AGAINST THE CURB**

➔ **OPENING FACING THE STREET**

➔ **3 FEET AWAY FROM PARKED VEHICLES**

➔ **DO NOT BLOCK THE BIKE LANE OR SIDEWALK**



Collection starts at 7 a.m. Per city code, carts must be removed from the street no later than 7 a.m. the day after pick up.

Cardboard will be picked up by a separate DWR truck if it is flattened and stacked next to the recycling cart. Do not force large pieces of cardboard into the recycling cart.

DWR operates as usual on all holidays except Christmas and New Year's Day. Please call DWR (756-4646) if you have any questions.

REMOVING RECYCLABLES FROM RECYCLING CARTS IS STEALING AND IS A VIOLATION OF CITY MUNICIPAL CODE 32.01.060.

Discourage recycling theft by placing your recycling cart out the morning of pick up instead of the night before.



For more collection information and to find out when your trash and recycling is collected, visit DavisRecycling.org.

BUSINESS RECYCLING

Don't throw your profits out in the trash!

Recycling service is free with regular trash service in Davis. This means that you may be able to save money on your garbage bill if you recycle more and decrease the amount of trash you produce.

REMOVING RECYCLABLES FROM RECYCLING CARTS IS STEALING AND IS A VIOLATION OF CITY MUNICIPAL CODE 32.01.060.

Want some help?

The City of Davis Public Works Recycling Program offers free recycling assessments for all Davis businesses. By looking at the type of waste you produce and your business set-up, they can offer suggestions and advice about how to reduce your waste, increase your recycling and save you money. Call the City Recycling Program at 757-5686 to set up an appointment.

Recycling is easy as 1, 2, 3!

These easy and essential steps can help you set up and maintain a successful recycling program at your business.

- 1) **Easy to see** Recycling should be convenient and obvious. Easy-to-read labels are extremely important. Consider purchasing clear containers that allow people to see what can be placed inside. Specialized lids that limit what can be placed inside can further reduce contamination of recyclables.
- 2) **Easy to find** Place a recycling container next to each garbage receptacle to prevent recyclables from ending up in the trash. Be sure the trash and recycling containers are clearly labeled.



Place paper recycling bins next to desks, copy machines, printers, fax machines and mailboxes. Place recycling bins for bottles and cans in break rooms, near vending machines and near refrigerators.

- 3) **Easy to remember** Let your staff know where your recycling containers are and encourage them to place recyclables in the proper place. Integrate recycling information into your new employee training and have quick recycling reminders during staff meetings.

Got Labels?

If you are in need of some recycling labels or posters, contact the Public Works Department (757-5686). Labels for "Plastic", "Glass", "Cans" and "Paper" are available for free, as well as a variety of posters that encourage recycling and waste reduction.



You can get a free recycling bin from California's Beverage Container Recycling Program. Visit BottlesAndCans.com and fill out a simple online request form to get a free recycling kit with posters, recycling labels and a recycling bin.

Is your business good at being green? Be recognized for it!

Partners for a Greener Davis is a green business program that recognizes Davis businesses that operate in an environmentally friendly fashion. Green Business Partners receive recognition in the community via certificate, window placard, and free local media. Visit CityOfDavis.org/pw/GreenPartners for more information.

APARTMENT RECYCLING

If you live in an apartment community with ten or more units, you receive communal recycling service. Recycling carts are located in or near the trash enclosures. Most apartment properties have two carts: one for mixed paper and one for containers (plastic, glass and cans). Please do not place trash in the recycling carts.



Cardboard

To recycle large cardboard boxes, flatten and stack them next to the recycling carts. Cardboard can make up a large portion of the waste stream. Please recycle your cardboard boxes!

Recycle your junk mail

Did you know that all your unwanted mail is recyclable? Newspapers, advertisements, envelopes and more—it can all be recycled with regular paper. If you do not have a paper recycling container next to your mailbox, you can ask your manager to request an additional paper recycling cart from Davis Waste Removal for free.



Are you moving out?

Please don't throw your unwanted furniture and household items in the trash! Consider donating your unwanted stuff to a thrift store or charity. See the reuse information on pages 13-14 of this guide or go online to DavisRecycling.org and check out our Recyclopeda, where you can find out how to reuse and recycle over 200 different items.

HAVE YOU BEEN RECYCLING?

iBIN Recycling!

WITH MY IN-APARTMENT RECYCLING BIN

Thanks to grants from CalRecycle, the City of Davis has provided apartments in Davis with an iBIN (an in-apartment recycling bin). The iBINS should be used to collect recycling in apartments. When the iBIN is full, bring it to the community recycling carts and sort the recyclables into the proper cart—paper in one cart, glass, plastic and cans in the other. Please remember that the iBINS are the property of the City of Davis. **If an apartment resident moves, the iBIN should be left behind for the next resident.** Managers may charge a replacement fee if the iBIN is lost or stolen.



The iBIN

If you do not have an iBIN in your apartment, ask your apartment manager. If they do not have any extra iBIN, contact the Recycling Program at pwweb@cityofdavis.org or call 757-5686.

COMPOSTING

Why Compost?

Composting is a means of using natural decomposing processes to turn kitchen and yard wastes into a nutrient-rich soil supplement for your yard or garden. Returning organic matter to the land perpetuates natural biological cycles and is an ecologically sensible means of using organic wastes. It also has the potential to divert a significant amount of waste from our landfill. If proper composting techniques are followed, composting can require very little work and be odor and rodent free.

What Can I Compost?

Grass clippings, weeds, plants, flowers, chopped twigs, tree leaves, prunings, hay straw, sawdust, wood chips, fruits and vegetables, coffee grounds and filters, paper towels, tea bags, egg and nut shells, bread, grains, pasta, legumes, houseplants, flowers etc. Do *not* place these materials in your compost pile: meat, fish, bones, dairy products, grease, fat, oil, pet feces, “compostable” diapers, invasive weeds, badly diseased plants and large branches. To make compost faster—chop materials into small pieces before adding them to your compost pile.

Essentials of Composting

There are four essential factors for maintaining a healthy and active compost pile:

1. Aeration: A compost pile should be turned every one to two weeks so that it remains aerobic (oxygenated). If you do not turn your pile regularly it will become anaerobic (lacking oxygen) and will begin to emit foul-smelling odors as well as slow down decomposition. Chop materials into small pieces to enhance airflow and increase surface area.

2. Temperature: The higher the temperature of the pile, the more rapid the decomposition rates. A “hot” compost pile can reach 120-180 degrees Fahrenheit. A pile that is smaller than 1 yard in any dimension will usually have insufficient internal volume to maintain high temperatures.

3. Moisture Content: The pile should be kept moist but not soggy. If the pile is too wet, water will fill up the air spaces and the pile will become anaerobic. If your pile is usually uncovered, you may want to cover it with some type of lid during heavy rains to prevent over saturation.

4. Carbon-Nitrogen Balance: Wet or “green” materials, such as fresh grass clippings and food scraps, tend to be high in nitrogen, while dry or “brown” materials, such as leaves and dried yard materials, are high in carbon. You should try to maintain a balance of $\frac{2}{3}$ dry carbon-rich materials and $\frac{1}{3}$ nitrogen-rich materials in your compost pile.

Building Your Pile

Compost bins, although not required for composting, can be constructed from almost anything. Choose a design and materials to suit your needs, taste, and pocketbook. If you do not want to build your own bin, a wide variety of commercial compost bins are also available. Here are a



COMPOSTING

few different options for compost piles and bins:

1. Loose Pile—The loose pile is easier to turn but takes up more space than a bin.
2. Hoop Bin—This is one of the simplest and least expensive kinds of bins. You will need about 10 feet of chicken wire, hardware cloth or other flexible material with holes. The ends should be fastened together with wire or hooks.
3. Wood Pallet Bin—Attach several wooden pallets together with screws and you have a sturdy compost pile that is easily turned.

Harvesting your compost

You should start getting finished compost in about 3 months. When you turn your pile you'll notice some dark brown material at the bottom on your pile—this is the finished compost. Before spreading your finished compost in your garden, dry it out in the sun for a few days to cure it and kill any remaining plant viruses or weed seeds.

Troubleshooting Guide

- Compost pile is not heating up.
 - Pile is too dry—add water.
 - Pile is too small—build the pile to at least 3'X3'X3'.
 - Lack of nitrogen-rich materials—mix in grass clippings, kitchen scraps, or fresh manure.
 - Particle size too big—chop or grind materials.
- Compost pile smells bad.
 - Not enough oxygen—aerate by turning the pile.
 - Pile is too wet—add sawdust, dry leaves, etc.
 - If pile smells like ammonia, too much green material may be present—turn the pile and add dry-woody materials. Stop adding food scraps.
- There are rodents in the compost pile.
 - Non-compostable material present—remove dairy products, meat, or bones.
 - Food scraps not covered—cover green wastes with dry materials. Stop adding food scraps until the problem is corrected.

More Information

For more information about composting and City-taught composting classes, see DavisRecycling.org.

Learn More

Davis residents in single-family homes may sign up at any time for a free compost correspondence class. After signing up, a packet of information will be mailed to you. Review the material, then complete and return the enclosed quiz to the Public Works Department. You will be notified when you can pick up an easily-transported compost bin (while supplies last). Contact Public Works at 757-5686 or pwweb@cityofdavis.org for a compost correspondence class packet.



Tip: To keep rodents away from your compost bin, ALWAYS bury food scraps at least 12 inches deep in your pile, turning your pile regularly and keep it moist.

WORM COMPOSTING

Let worms recycle for you! Worm composting, also called vermicomposting, can be done year round, indoors or outdoors. It's ideal for small spaces in the garage, outdoors under a tree, or under the sink. A medium sized worm box can process more than 5 lbs. of food waste each week! In return, you get a valuable soil amendment good for growing just about anything. Worm composting is ideal for apartments and for composting food scraps quickly.

The Worms

Red worms, also called red wigglers, are the best worms for worm composting. Red worms are a different species from common garden worms and night crawlers, which need large amounts of soil and cool temperatures to survive. One pound of red worms (about 1000 worms) is enough to start a worm bin. Get your worms from a friend's bin, or buy them from a worm farm or bait shop. Just type "worm composting" in your internet search bar to find a place that sells worms. Once your worm bin is established you will have enough worms to help your friends start vermicomposting too.



The Worm Bin

You may already have what you need to make a worm bin. A plastic storage container, wash basin, or a sturdy wooden box can be easily fashioned into a home for your worms. If you prefer, you can buy a worm bin specially designed for worms. Whatever you use, your worm box should be shallow, since worms like to live near the surface. About one foot deep with two to three square feet of surface area is best. Your bin should also have a tight fitting lid and 1/8" holes drilled in the lid and on the bottom for ventilation and drainage. With proper care, your worm bin will have a pleasant odor, like that of fresh earth dug out of the ground.



Locating Your Worm Bin

Be careful not to freeze or overheat the worms, especially if they are outside. The worms can tolerate temperatures from 50°-84°, but they prefer 55°-77°. They reproduce and compost the fastest when the weather is warm, so if you have your bin outdoors, keep in mind that the worms will not compost food scraps as quickly during the fall and winter as they do in the spring and summer. The drainage, or "worm tea" that comes out of the worm bin is an excellent liquid fertilizer. You may want to collect it, or set your worm bin in your garden to let the worm tea seep into the soil. If your bin is outside, keep it in complete shade under a tree or bush—do not place the bin in full sun or the bin will heat up and kill the worms. Do not place the bin outdoors on concrete or asphalt—even in the shade—the radiant heat from the paved surface will kill your worms. If your bin is outside in the wintertime, place it in a protected area close to your house so that your worms will not freeze.

Tip: You may want to move your worms into your home or garage during the winter to protect them from freezing temperatures. If you are using a plastic storage bin as a worm bin, get an extra bin of the same size, fill the bottom with shredded newspaper, and place your worm bin inside the other bin to prevent the worm tea from leaking onto your floor.

WORM COMPOSTING

Bedding

Eight or ten inches of bedding inside your bin will provide the worms with a damp, aerated place to live. Common bedding materials include strips of newspaper, shredded cardboard, manure, leaves, or peat moss. Moisten the bedding and squeeze out excess water before placing inside your bin. Add a handful or two of soil to provide grit that will help the worms digest food particles.

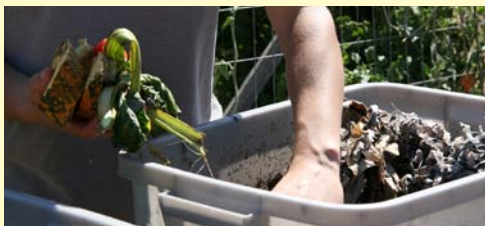


Feeding the Worms

Worms will eat fruit and vegetable peelings, coffee grounds and filters, tea bags, rice, pasta and bread. To avoid unpleasant odors and pests, raise your worms as vegans and do not feed them any meat or dairy products. Do not feed your worms salad leftovers if there is any dressing on it, or pasta with a meat sauce. Be careful not to add too much acidic material to your worm bin—coffee grounds and citrus scraps are tasty to worms, but an acidic environment in the bin can kill your worms. If your worms are avoiding the coffee grounds or citrus scraps in your worm bin, stop adding acidic material—the bin may be too acidic.



Bury your food scraps at least an inch deep in the bedding to discourage molds and fruit flies. Bury the food in a different corner of the bin at each feeding. The next time you look, it should be gone. If not, try feeding your worms a little less for a while.



Harvesting the Compost

After a few months, you will notice that the original bedding has disappeared and has been replaced with rich, dark worm compost. It's harvest time! Put your worms on a diet. In a few days, you can either 1) separate the worms from the compost by hand and start anew with fresh bedding, or 2) coax your worms to one side of your box by feeding only on that side for a few weeks. Then harvest the worm-free side of the box, replace it with fresh bedding and do it again.

When you start scooping out the compost, you may notice that there are still a lot of worms in it. Place the compost in a pile in the sun (as long as the sun is not too hot!). The worms will bury themselves deep in the pile to avoid the sun, so you can scrape off the compost and put the worms back in the bin.



Once you have removed the compost, dry it out in the sun and screen out any un-composted scraps left. Those can be thrown back inside the worm bin. Once the compost has been cured in the sun, it can be added to your garden—a home-made, natural fertilizer!

More Information

For more information about composting and City-taught composting classes, see DavisRecycling.org.

FOOD SCRAP COMPOSTING

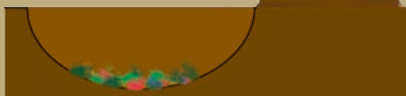
These food scrap composting methods are **ONLY** for composting fruit and vegetable trimmings, bread, rice, pasta, tea bags, coffee grounds, coffee filters and other such materials. Please do **NOT** attempt to compost meat, fish, poultry, dairy products, pet waste or greasy food through these methods. These items can attract pests and cause problems during composting.

In-Ground Composting

A very simple way to compost your food scraps is just to bury them at least 8 inches deep in your garden. Food scraps can be buried in empty areas of vegetable and flower gardens, or in holes outside the drip line (below the ends of branches) of trees and shrubs. Use a shovel or post hole digger to dig a hole or trench about 1 foot deep. Add 2 to 3 inches of food scraps to the hole. Chop and mix scraps into soil, then cover the food scraps with at least 8 inches of soil to keep pests out.

Check occasionally for signs of digging by rodents, dogs or other pests. If you see signs of digging, it may be better to switch to a digester or worm bin. Food scraps may take from 1 to 6 months to decompose depending on the season, moisture, soil and the type of food scraps that are buried. Seeds and small seedlings may be planted on top of buried food scraps immediately. Large transplants should not be planted until the food has decomposed. Do not bury more food scraps in the same place until the first scraps have been fully composted.

The hole should be at least 12" deep.



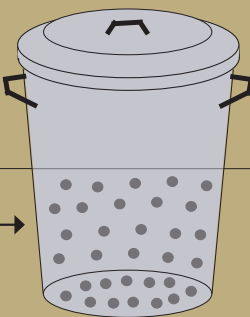
Add 2 - 3" of food scraps to the hole, mix with soil, and cover with at least 8" of soil.

Composting with a Food Digester

One of the simplest ways to compost food waste is in a food digester. You can make your own using a 32 gallon galvanized garbage can with a tight-fitting lid. Drill or punch $\frac{1}{4}$ inch drain holes in the bottom and lower $\frac{1}{3}$ of the can. Dig a hole at least 15 inches deep in a well-drained area of your yard and set the can into the hole—none of the drilled holes should be visible above the soil. Push the soil back in around the sides. The food digester is ready! Collect food scraps in the kitchen, and place the scraps in your food digester as needed. Once the digester is full, the compost can be harvested. Remove the upper foot or so of un-composted food and shovel the dark, soil-like compost out of the bottom. Watch out for the jagged metal around drainage holes. Lay the finished compost in the sun to dry.

Tight fitting lid

$\frac{1}{4}$ " - $\frac{3}{8}$ " drainage holes in the bottom and sides



The can should be $\frac{1}{3}$ to $\frac{1}{2}$ buried in the soil—none of the drilled holes should be visible above the soil.

Grasscycling Instead of hauling your grass clippings to the curb, leave them on the lawn as a fertilizer. If you are thinking about purchasing a new lawn mower, consider buying a self-mulching mower. These mowers chop grass clippings finely so that they can readily decompose into your lawn. Mulch mowers are available locally and come in a wide variety of styles and brands. Mower conversion kits are also available for some brands of mowers.



THE FOUR R'S

Now all rigid plastics #1 – #7 are accepted for recycling!

This includes plastic items such as toys, clothes hangers, laundry baskets, crates, buckets, CD cases, flower pots, nursery trays, patio furniture, storage containers and other household items. Rigid plastics are stiff and rigid.

NO film plastics, (e.g. plastic bags, film & wrap) and expanded polystyrene (e.g. STYROFOAM™ Brand Products, disposable foam food containers, etc.).

Recycling is easy in Davis!

Recycling pick-up service is free and available to all Davis Waste Removal customers, but if you want to bring your recyclables to a center, here are a few local options:

Davis Waste Removal (DWR)

DWR's 24 hour recycling center (2727 2nd St.) accepts used motor oil & filters, cardboard, steel and aluminum cans, rigid plastic, plastics #1-#7, glass, paper and scrap metal for free recycling. Call DWR at 756-4646 or visit www.DWRco.com for more information.

CRV Buyback Centers

Turn your recycling into money! Check your bottles and cans for CRV (California Refund Value) and bring them to a CRV Redemption Center for a refund:

Aztlan Recycling, 400 Mace Blvd.

Davis Waste Removal, 2727 2nd St., Mon-Fri

9:30 a.m. - 2:00 p.m., Sat 8:00 a.m. - 4:00 p.m.

NexCycle at Save Mart, 1900 Anderson Rd., call (909) 796-2210 for hours.

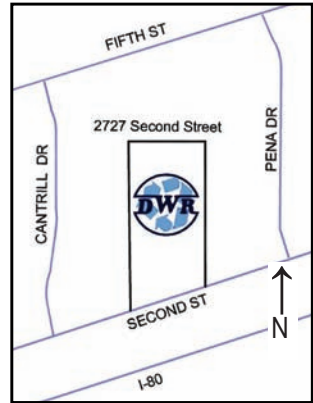
For information about the CRV program or buyback locations, call CalRecycle at 1-800-RECYCLE or visit www.BottlesAndCans.com.

Yolo County Central Landfill (YCCL)

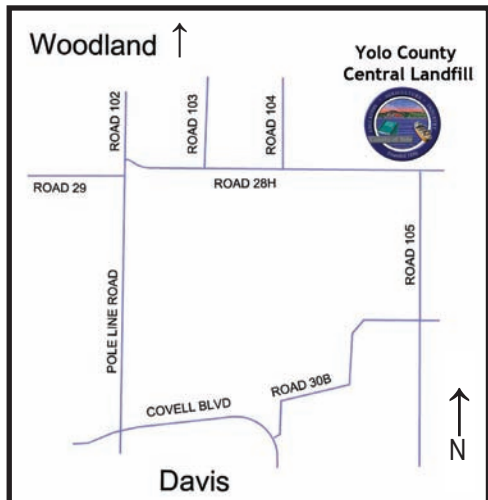
The landfill offers free recycling for plastic #1-#7, cans, household & car batteries, cardboard, used motor oil & filters, latex paint, glass, paper, electronics, and scrap metal. Call the landfill at 666-8729 for more information. Located at Road 104 and Road 28H north of Davis, the landfill is open Mon-Sat 6:30 a.m. - 4:00 p.m. and Sun 9:00 a.m. - 5:00 p.m., closed New Year's Day, Easter Sunday, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

Construction and Demolition Materials

Construction and demolition materials can be brought to the Yolo County landfill where they will be sorted and recycled. Call the landfill for more information (666-8729).



REMOVING RECYCLABLES FROM RECYCLING CARTS IS STEALING AND IS A VIOLATION OF CITY MUNICIPAL CODE 32.01.060.



DROP-OFF RECYCLING

THE FOUR R'S

RECYCLE by turning your old items into new ones. Help us save resources and prevent waste by practicing the other R's:

REDUCE: Stop waste in the first place. Buy products in bulk and with less packaging.

REUSE: Find a new use for your old items instead of throwing them in the trash.

REBUY: Buy items made from recycled material to increase the demand for recycling.

REDUCE

Part of being a good neighbor is reducing the amount of garbage you produce. The State of California's goal is to eventually achieve zero waste—recycling virtually everything with nothing going into landfills. In order to make that happen, we need to start reducing how much waste we produce.

Waste Reduction Tips

- ♻️ Bring your own bag when you shop.
- ♻️ Select products with the least wasteful packaging.
- ♻️ Use washable mugs and containers instead of paper cups and plastic baggies.
- ♻️ Use both sides of a sheet of paper and then recycle it.
- ♻️ Pack your lunch in a reusable cloth bag or lunch box.
- ♻️ Use sturdy, washable utensils and dishes for picnics and outdoor parties.
- ♻️ Use a sponge or dishcloth instead of a paper towel.
- ♻️ Use rechargeable batteries or an AC adaptor whenever possible.
- ♻️ Before throwing a product away, check into repair and warranty options.
- ♻️ Buy concentrates, returnables and products in bulk.
- ♻️ Reuse plastic bags to line small garbage cans.

REUSE

UC Davis Bargain Barn - The Bargain Barn sells excess and surplus equipment to campus departments and to the public. Call 752-2145 for more information.

Davis Enterprise - Items can be listed in the "free section" for 3 days at no cost.

Reusable Products Days - Often reusable items are turned in at the household hazardous waste days. Check out the landfill during a Household Hazardous Waste Drop-Off day to get free reusable household products like paints, household cleaners, fertilizers, etc.

Thrift Stores - Local thrift stores are an excellent place to donate a wide variety of reusable goods. Please call individual stores to verify drop-off times and locations, as well as if they currently accept the items you wish to donate.

Just Kidding, 213 F Street (753-8687)

L Street Furniture, 421 L Street (758-1833)

R & R Thrift, 1640 E. 8th Street (759-9648)

Tots Trade Center, 515 G Street (400-5922)

Yolo County SPCA Thrift Store, 920 3rd Street (758-0544)



Internet Groups - Post items you would like to sell or give away on sites such as www.Sacramento.Craigslist.org, www.FreeCycle.org, or the California Materials Exchange, www.CalMax.org.

THE FOUR R'S




Below is a partial list of local groups and the materials they accept for donation. Please call individual groups for more information and to verify if they can currently accept the items you wish to donate. For more reuse options, visit the City of Davis Recyclopeda at www.DavisRecycling.org.

Organization	Materials Accepted
Davis Community Meals (756-4008)	furniture, household goods, food
Habitat for Humanity (668-4301)	building materials, tools
Progress Ranch Treatment Services for Children (753-2566)	boys clothes & shoes, household goods
International House, Davis (753-5007)	kitchen and dining goods
Short Term Emergency Aid Committee (758-5444)	clothes, shoes, baby diapers, food
Sexual Assault & Domestic Violence Center (661-6336)	baby supplies, non-perishable food, personal care products & cell phones
The Davis Enterprise (756-0800)	rubber bands & plastic rain bags
Woodland Toy Library (666-2918)	toys
Yolo Community Care Continuum (758-2160)	automobiles, linens, furniture, pots & pans, washing machines/dryers
Yolo County Public Library (757-5593)	books, magazines, CDs & DVDs
Many dry cleaners and thrift stores	clothes hangers
Some nurseries/growers at farmers market	flowerpots/trays, strawberry baskets

REUSE AND REBUY

Moving Guide- Reuse as you relocate!

To be a good neighbor even as you move, try to minimize the amount of trash you throw away. When you are unpacking it can be challenging to deal with all that “extra stuff.” Please recycle and reuse all that you possibly can.

-  **Moving Boxes** *Recycle:* Flatten and stack next to the recycling cart.
-  **Styrofoam Peanuts and Bubble Wrap** *Reuse:* Bag peanuts securely and take peanuts and bubble wrap to **The UPS Store** (1411 W. Covell Blvd. and 140 B St.), **Parcel Dispatch PDQ** (216 F St.), **Postmark's** (417 Mace Blvd.) or **Pak Mail** (1520 E Covell Blvd.). Do not place these items in the recycling cart.
-  **Newspaper and Packing Paper** *Recycle:* Place in recycling cart with paper.

REBUY

Buy Recycled Products and “Close the Loop”

The recycling loop is incomplete until recycled materials are re-manufactured into products and purchased by consumers. That's why it is important to “buy recycled.” Products made from recycled materials consume less energy, use fewer or no raw materials and sometimes cost less. Recycled material can be used to make paper products, playground equipment, clothing, jewelry, building materials and more! Check out the green gift guide at www.GreenGiftGuide.com.



STREET SMARTS TRAFFIC SAFETY

Street Smarts is a traffic safety program run by the City of Davis Public Works Department. It is designed to make our streets safer, to reduce the number of traffic-related accidents, injuries and deaths.

Street Smarts addresses traffic problems at their source: directly with drivers, pedestrians and cyclists. The program's goal is to raise public awareness about our attitudes and actions on the streets, and to remind us that laws are laws for everyone. Street Smarts offers new ways of thinking about the roles that each of us can play as part of a smart solution to public safety and health.

Pedestrians, bicyclists and motorists can all do their part to make Davis streets safer. Safer streets mean more people will feel comfortable walking and bicycling and that means a healthier environment for everyone.

Pedestrian Safety:

- Obey all traffic signals, signs and street markings, such as crosswalks.
- Look in all directions when crossing. (Left, right, left, front and back)
- Whenever possible, cross the street at a corner or a marked crosswalk only. Do not cross mid-block.
- Stay alert at all times – especially in bad weather.
- Parents: Choose the best route to school and walk it with your children.
- When walking to school, children should walk with a group, parent, or “buddy.” Avoid walking alone.
- Obey the directions of adult Crossing Guards and School Safety Patrols.

Vehicle Safety

Speeds

- Never drive faster than is safe for weather, roadway conditions or traffic conditions. The posted speed limit is intended for ideal conditions.
- If for some reason you must drive slower than other traffic, drive in the far right lane if possible.
- DO NOT use your four way flashers/hazard flashers while moving. Only use them when at a complete stop.
- If you can not maintain the speed limit and conditions allow, use smaller surface streets. It may be a longer route, but it will be safer for all motorists.
- Maximum speed on the freeway is posted at 65 mph. While pulling a trailer a vehicle may only travel at 55 mph.
- County roads speeds are 55 mph when not otherwise posted.

Overtaking/Passing

- When passing another vehicle or bicycle, pass on the left and always allow plenty of distance between yourself and the slower vehicle.
- Always ensure you have sufficient room to pass. Never pass on a curve or a grade.
- You may pass to the right only if you can do so safely and only if you do not drive off the paved or main traveled section of the roadway.

Right of Way

- Never insist on the right of way. If someone else violates your right of way, allow them. It will only delay you a few seconds.



STREET SMARTS TRAFFIC SAFETY

- A driver approaching an intersection must yield the right-of-way to traffic already lawfully using the intersection.
- At intersections where two or more drivers stop at STOP signs at the same time, the driver on the left must yield the right-of-way to the driver on the right.
- A driver entering a traffic circle must yield the right-of-way to drivers already in the circle.
- Drivers must yield to pedestrians legally using marked or unmarked crosswalks.
- Share the roadway with bicyclists. They have the same rights and rules on the roadway as motor vehicles.

Drivers and Passengers

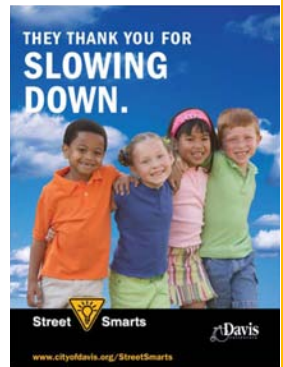
- The use of cell phones while operating a motor vehicle is not permitted under state law. Drivers over the age of 18 may use cell phones only with hands-free headsets. Writing, sending or reading text-based communication while driving is also not permitted under state law.
- Drivers under the age of 18 may NOT use a cell phone or hands-free device while operating a motor vehicle.
- The driver is responsible for all passengers. They must ensure all passengers are seated and belted properly before the vehicle is placed in motion.
- Seat belts MUST be worn as designed. A shoulder belt behind the back is dangerous and illegal.
- Children up to 2 years old must ride in a rear facing child restraint seat. New recommendations suggest keeping your child in a rear-facing seat as long as possible, or until they reach the top height or weight limit allowed by the seat's manufacturer.
- Children should ride in a forward-facing car seat with a 5-point harness until they reach the top height or weight limit allowed by the car seat's manufacturer.
- Children who have outgrown a front-facing car seat should ride in a booster seat until they are big enough to fit in a seat belt properly. For a seat belt to fit properly the lap belt must lie snugly across the upper thighs, not the stomach. The shoulder belt should lie snug across the shoulder and chest and not cross the neck or face.
- Children should ride in the back seat until they are approximately 13 years old.

Inclement Weather

- Use your headlamps whenever vision is obscured due to weather conditions.
- You must use your headlamps when your windshield wipers are on continuously.
- When in fog use low beam lamps only, both day and night. Reduce your speed. Watch closely for other vehicles. DO NOT tailgate in heavy fog conditions.
- During the first rain of the season watch out for slippery road conditions. The collective oils and debris of the summer rise to the surface reducing roadway friction.
- Replace windshield wipers in October to ensure a good clear windshield through the winter.
- When traveling long distances, keep a survival kit including packaged food, water, blankets, flashlights and a battery powered portable radio.

Warm Weather Driving

- Maintain the vehicle coolant levels.
- Maintain a clean and debris-free windshield.



BICYCLES

- Check tire pressure and tread regularly.
- Use air conditioner with windows up to obtain better fuel mileage.
- When the air conditioner is on, do not turn stereo up so loud as to drown out other outside noises, for example, horns and sirens.
- Maintain a survival kit same as the winter kit with plenty of water.

Following Emergency Vehicles

- When you see red lights and hear a siren, pull to the right curb safely, stop and wait for emergency vehicles to pass. Check for other emergency traffic before pulling back into the traffic lane.
- Never follow an emergency vehicle closely. They may make abrupt direction and/or speed changes.
- Pass parked fire apparatus cautiously. Firefighters may be entering or exiting the apparatus with various pieces of equipment.
- When a patrol car is stopped on the side of the road with its red and blue lights on, allow extra room when passing.

For more information about bike, pedestrian and traffic safety, contact the Public Works Department at 757-5686 or visit www.cityofdavis.org/streetsmarts.

Bicycles

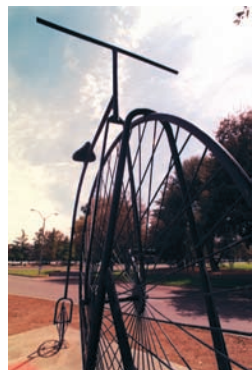
The bicycle is one of the most environmentally-efficient modes of transportation. By using a renewable energy source—the human body—the bicycle, in contrast to the automobile, is non-polluting. The bicycle also uses much less space than the automobile, both parked and on the road, and is considerably quieter than other modes of transportation. The bicycle requires far less impactful land use than the automobile as well.

Riding a bicycle also has tremendous health benefits. Cycling is ranked among the top three exercises for improving cardiovascular fitness. According to the U.S. Center for Disease Control, the most effective activity regimens are moderate in intensity, individualized and incorporated into daily activity.

Cycling to work, school, or shopping as part of ones regular daily routine can be both a sustainable and time-efficient exercise regimen for maintaining acceptable levels of fitness. Studies have shown that bicycle commuters work more efficiently, arriving to work eager and alert and, due to a cyclists improved health, have fewer job-related injuries. Cycling can also generate a sense of liberation and pride. Traveling by bicycle, the rider becomes a part of the environment rather than isolated from it, getting to know different neighborhoods in the city and finding attractions that could be missed in an automobile.

It is the goal of the City of Davis to create and maintain an integrated system of bikeways, and to assure safe and convenient access to all areas of the city. The City encourages bicycle travel for both transportation and recreation, and works to promote bicycle use as a viable, attractive, non-polluting form of transportation.

Owing partially to Davis' flat topography and an extensive network of bike paths,



BICYCLES

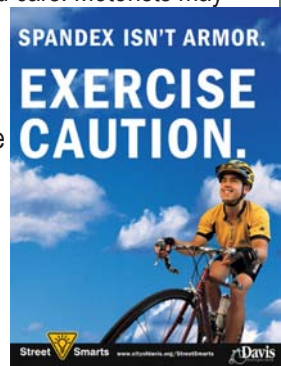
bicycling is a primary mode of transportation for many. Davis has bike lanes on approximately 95 percent of all its arterials and collectors. Seventeen percent of trips to work are by bike.



Bike Safety and Education

Riding a bicycle is fun. By using your bicycle instead of a car, you can help reduce air pollution and traffic congestion. Bikes are great for errands. Trips to the convenience store, the park, a restaurant, etc. are easy and fun.

- Before getting on your bike, always check it out to make sure it's safe by giving it a quick inspection—this includes checking for loose parts such as handlebars, seats and pedals—and checking for proper tire pressure.
- Be predictable—follow all traffic laws and avoid “surprising” motorists.
- Obey all traffic signals, signs and street markings.
- Wear a properly fitted and buckled helmet at all times. Remember, it's the law for those under 18!
- Using a cell phone or listening to music while bicycling is dangerous! Keep your eyes and ears focused on the road and the traffic around you.
- Parents should help children choose the best cycling routes to and from school.
- When riding on the road, use the bicycle lane when possible, or ride on the right side of the road, in the same direction as traffic.
- When riding in the street, watch for right-turning vehicles and cars entering or leaving driveways.
- Be conspicuous—always wear bright clothing during the day, and light colored or reflective clothing at night.
- When riding at night, help others see you by always making sure you have a good light.
- Increase your visibility to others by using reflectors on the back of the bike, on your pedals and in the wheels. Use a red light on the back of your bicycle to help others see you from behind.
- Look both ways before entering the street from a driveway, sidewalk, or bike path.
- Use hand signals whenever possible before turning.
- Never make a left turn from the right hand bike lane. Make your turns from the left turn lane, or if there isn't one, get in the middle of the travel lane before turning. Alternately, you can use crosswalks just like pedestrians.
- Avoid weaving between or leaving the curb between parked cars. Motorists may not see you when you enter traffic.
- Don't pass on the right. Motorists may not look for or see a bicycle passing on the right. Pass on the left like other vehicles.
- Assume that other drivers don't see you until you make eye contact with them. Eye contact is important with any driver who might pose a threat to your safety.
- Scan the road behind. Learn to look back over your shoulder without losing your balance or swerving. Some riders use rear-view mirrors, but still look before turning.
- Avoid road hazards—watch out for gravel or debris. Cross



BICYCLES

railroad tracks at right angles. Be alert for yard debris piles that have been improperly placed within the bike lane.

- Keep both hands ready to brake. You may not stop in time if you brake one-handed. Allow extra distance for stopping in the rain, since brakes are less efficient when wet.
- About traffic circles:
 - Merge into the circle smoothly just like you would on a freeway onramp.
 - Traffic always flows counter-clockwise.
 - Bikes already in the circle have the right-of-way over bikes entering the circle.
 - If you miss your exit, just continue around the circle until you reach your exit point again.



Before You Ride

Make sure your bicycle is in good riding condition. On a periodic basis you should take it to a bicycle shop for a check-up or inspect the following things yourself:

- Brakes - Standing next to your bike, push it forward squeezing each brake one at a time. Each brake should offer considerable resistance.
- Wheels - Grab hold of each wheel alternately and try to move it side to side without moving the frame. The wheel shouldn't wobble. Lift the bike and spin each wheel. Look for spots where the brake touches the rim. If it does, this will require adjustment (truing).
- Tires - Check the pressure with a gauge or by thumb pressure (it should be firm). The recommended pressure is normally printed on the side of the tire. Fill your tires using a hand pump to avoid over inflation or possible blow-out caused by using gas station compressors set for automobile tires. Check tires for cracks in the tread or sidewalls prior to inflating and tread wear. Weathering of the tires can make them dangerous. Catastrophic failure is possible on old weathered tires. Too low a tread can lead to getting punctures more easily and poor bike handling while riding. Weathered or worn tires should be replaced.
- Seat - Adjust seat height so your knee is just slightly bent when the pedal is straight down. If major adjustments are needed, make them incrementally, allowing your body time to adjust to each new setting.
- Handlebars - Holding the front wheel still, try to move the handlebars from side to side. If the handlebars turn more than the wheel, they need tightening.
- Steering - Holding the handlebars, depress the front brake lever and rock the bike back and forth over the front wheel. If you detect looseness, or a knocking noise, the headset needs adjustment.
- Chain - Rust should not be present on the chain nor should it make excessive noise while pedaling. The links should not be stiff. Try spinning the cranks backwards to examine the chain to listen for excessive noise, rust or stiff links. These conditions can cause excessive wear on the bike, difficulty in shifting gears and make the bike harder to ride in general.



Basic Cycling Essentials

- Helmet (ASTM or CPSC approved)
- Water bottle(s) & cage(s)
- Lights & reflectors (for night riding)
- Lock
- Frame pump
- Spare tube, patch kit, tire levers
- Compact first aid kit
- Tools specific to your bike

Getting Started Commuting by Bicycle

- Arrange for secure bike parking. Contact your employer about parking or carry a good lock.
- When choosing your route, take into account automobile traffic volumes, amount of roadway crossings, route directness, route lighting, and other factors.
- Drive your route first. Look at shoulder construction, street surface and street condition of the route you are considering for your commute.
- Check the mechanical safety of your bike.
- Obtain necessary repair tools and learn to use them. Consider bringing a spare tube, patch kit, tire irons, bike pump and a set of simple tools. Most bike shops can make recommendations specific to your bike.

Bike Parking

There are bicycle racks all over Davis. Using a rack (instead of a tree or a pole) is more secure, and keeps your bicycle out of the way of cars and people.

Make sure that you attach the lock to something secure, and in a way that doesn't allow the wheel to be removed from the frame—attach a small u-lock inside the rear triangle, locking to the rear wheel and to the rack (there's no need to attach it to the frame, since the rear wheel cannot be pulled out through the rear triangle if locked this way).

Bike Locker Information

Have you ever wished you had a place to store your bike on a rainy day or have been parked under a tree and wondered what gifts the birds may have left? Well, we have a place for your pedal-propelled vehicle.

The City of Davis has bike lockers available for rent in several locations around town. The lockers are located in areas to give bicycling commuters a safe and secure place to store their bikes while they are traveling or working. Lockers are available for rent, on a first come, first serve basis in the following locations:

- City Hall – 23 Russell Blvd. (in the rear parking lot)
 - Train Depot – 2nd and G Streets/H Street Alley
 - Mace Blvd. Park n' Ride – Corner of Mace Blvd. and County Road 32A
- Rental rates are \$25 for 3 months, \$45 for 6 months, and \$80 for 1 year. There is also a one time key deposit of \$25 at the time of rental; refundable when key is returned.

For more information regarding locker rentals, please contact the City of Davis, Public Works Dept. at 757-5686 or email us at pwweb@cityofdavis.org. You can also stop by our office located at 1717 Fifth St., Building A. Monday through Friday, 8 am to 5 pm.

Seven Reasons Why You Should License Your Bike:

1. Theft Prevention & Recovery—Sends a warning to would-be thieves. Registration information, including serial number, is available to law enforcement agencies.
2. Increases the likelihood of your stolen bike being found and returned.
3. Accident Victim Identification—Provides a means of identifying accident victims, especially children, who typically carry no form of identification.
4. Money for Bike Programs—License revenue supports UCD bike programs which directly benefit local cyclists.
5. It's inexpensive—A new license costs \$8, renewals are \$4—both are valid for up to three years
6. It's Easy—Bring your bike to the UCD TAPS Office on UC Davis campus, or to the Davis Farmers Market, second Saturday of each month, weather permitting. Bike licenses can also be purchased at most local bike shops.
7. It's the Law.

PARTNERS FOR A GREENER DAVIS

Partners For a Greener Davis is a green business program that recognizes businesses that make environmentally sustainable choices. The program aims to educate the Davis business community about, and encourage participation in, a variety of environmentally sustainable or “green” business practices.



Partners for a Greener Davis

To become certified as a Green Business Partner you must:

1. Comply with all environmental regulations applicable to your business. Please ask staff about this.
2. Implement a variety of measures to save energy and water and reduce waste. The program checklist walks you through this step! You may find you are already doing many of the things listed.
3. Pledge to continue these terrific efforts to prevent pollution and conserve resources.

Do I get credit for the good things I'm already doing?

Yes! In fact, your business may already qualify. These standards are designed to fit most businesses, but if certain measures are not applicable or feasible for your facility and operations, you may request an exemption or demonstrate alternative measures.

Do I have to do everything on the checklist to become a certified Green Business Partner?

No, there are many ways to qualify. You must meet the minimum standards in each category. Gold, silver or bronze certification status is awarded to each Green Business Partner based on the number of items completed on the checklist. In order to receive a certification level, a business must complete the required number of items in EACH section of the checklist. For example, in order to become gold certified, a business must check enough items for gold certification in ALL categories. Each section of the checklist clearly states how many items must be completed to achieve gold, silver and bronze certification status.

As a certified Green Business Partner, what sort of recognition do I receive?

Businesses that are certified under the Partners for a Greener Davis Program will receive a plaque to place in their window and a certificate with the Partners for a Greener Davis logo and the year in which they were certified. Green Business Partners will also be recognized in a variety of other ways, including newspaper mention, Partners for a Greener Davis website listing, a spot on the Davis Government Channel and other media as available.

How do I get started?

A business that wishes to become certified as a Green Business Partner can find all the information about the program and download the checklist on the Partners for a Greener Davis website www.cityofdavis.org/pw/greenpartners. Interested businesses can fill out the certification checklist and hand deliver or mail, completed checklist to: Partners for a Greener Davis Program, City of Davis Public Works Department, 1717 5th Street, Davis, CA 95616. Checklists can also be completed online and emailed directly to pwweb@cityofdavis.org

For more information, contact the City of Davis Public Works Department at 757-5686, or visit www.cityofdavis.org/pw/greenpartners.

POLLUTION PREVENTION

Where does the water go?

What happens to water from storms, lawn watering, or car washing? This water, called stormwater or urban runoff, flows into the City's storm drainage system through over 2500 storm drain inlets—the openings located along street gutters. The water moves through the storm drain piping below our streets to our rivers, creeks, wetlands, sloughs, delta, bay, and eventually the Pacific Ocean. Water that enters your curbside storm drains washes into these sensitive ecosystems and may carry pollutants that can harm plants and animals.

Initially, much of this water fills the City's detention and wildlife ponds which support an array of wildlife species. Other water flows through drainage ditches towards the northern and eastern edges of the City. A portion of the storm water that is collected in the City is conveyed to the Davis Wetlands where it is used to support this constructed wetlands system and all its wild inhabitants.

If you see anyone dumping questionable materials, please call City of Davis Public Works at (530) 757-5686. If it is an emergency, call 911.

Storm Water Pollution Prevention Tips:

The following is a list of tips that you can follow to help prevent storm water pollution.

- Avoid using toxic products outdoors. If you must use pesticides or fertilizers, use sparingly and avoid over spray on hardscape surfaces. Sweep any over spray back into landscaping areas when possible. Do not apply them if rain is expected as storm water will wash them into the ponds and creeks.
- Never sweep or hose yard waste into storm drains.
- When you change the oil in your vehicle, recycle the used oil and filter at a free collection center in Davis. Drain oil only over hard surfaces, contain or clean up any spills immediately. Spills may be cleaned up using clothes, rags or kitty litter. Dispose of clean up materials as hazardous waste and sweep up any residues. Do not wash excess residues off pavement into the gutter. See the recycling section of this guide for more details.
- Pick up and dispose of animal wastes in the garbage so it is not washed into the storm drain.
- Wash pets in a bathtub. If you must wash your pet outside, use non-insecticidal soaps and dump all waste water into a sink or into your landscape. Landscape will filter any residues out of the wash water.
- Use kitty litter or another absorbent material to clean spills of paint, cleaners, solvents and other toxic products. Sweep up excess absorbant materials and dispose of properly. Do not wash excess residues off the pavement and into the gutter.
- Clean painting tools in the sink instead of outside on the sidewalk or in the street.
- If you have a pool or spa, never clean the filter in the street or near a storm drain. Instead, rinse cartridge filters onto a dirt area and spade filter residue into your soil. Never drain chlorinated water into the gutter. Dechlorination chemicals can be purchased from local pool chemical suppliers. Follow manufacturer's instructions for use. Alternatively, you can drain chlorinated water to the sanitary sewer which is a sink, toilet, bathtub or shower drain inside your home.
- Place all yard materials in the street for pickup as noted within this guide. Never wash yard materials down into the gutter or storm drain.
- Never dump or allow plastics to enter the gutter or storm drain.

POLLUTION PREVENTION

Storm Water Pollution Prevention Tips *(continued)*:

- When developing planter beds, take care to design planting areas that are bordered with raised borders. The border should be higher than the level of the soil by at least an inch or two. This helps retain mulch or bark and soil when rains come and flood the planter. Sediments, bark and mulch in the storm drain system are considered a pollutant.
- When performing planting and other soil work, take care to sweep up excess soil of hard surfaces and back into landscaping. When working with raised soil mounds, make sure soil is stabilized when completed. Cover with weed cloth, geotextile mats, or broadcast native grasses to help stabilize soil when work is completed to prevent erosion of soil into the storm drain.
- When working with concrete take care to mix concrete within a contained system, such as a wheel barrow or the like. Do not allow excess concrete to be washed into the storm drain. Do not wash tools or wheel barrow into the storm drain or gutter. Consider washing tools off into landscape, soil areas or a disposable cloth used as a filter to catch concrete debris in wash water. Dispose of excess concrete when hardened in the garbage.

Car Washing

People often don't realize that when they wash their car in the driveway, they are actually harming the environment. Automotive frames, paint, brakes and exhaust contain heavy metals such as lead, zinc, iron oxide and asbestos. Soap contains phosphates, chlorine and other non- biodegradable ingredients that are toxic to fish and other aquatic life.

The Solution to Car Washing Pollution

Best Management Practices such as washing your car at a licensed car wash facility or redirecting wash water away from the storm drain can prevent pollutants from entering our wetlands, ponds and oceans.

- Wash your car at a licensed car wash facility. These facilities collect wash water and send it to the sanitary sewer system for treatment. Some facilities even recycle the water through on-site filtration for use as a pre-wash rinse!
- Charity car wash organizers should try and partner with licensed car wash facilities. Charities benefit from increased traffic and fund raising. The car wash owner benefits from increased business and good public relations. Everyone benefits from healthy local wetlands ecosystems!
- If car washing must occur outside of a licensed car wash facility, wash vehicles over turf grass or other vegetated soil. Another method would be to use a containment sump to capture wash water. This water may then be pumped into a sanitary sewer drain.

Save Water for More Important Uses

Professional car wash facilities are a water responsible alternative to washing your vehicle at home or in a parking lot. Most car wash facilities save water by using high pressure nozzles and pumps. This car wash equipment is designed to thoroughly clean a vehicle using minimal water. As a result, a fraction of the water is used compared to a garden hose typically used at home or charity car washes.



Think About It!

Would you intentionally throw buckets of dirty, soapy water in a river, pond or stream? That's what is happening when 100-200 cars are washed at home or charity car wash events.

POLLUTION PREVENTION

Paint Clean-Up

Painting can generate wastes that are extremely hazardous to your health and to the environment. These wastes include excess paint, used paint thinner, cleanup water, and wastes from prep work including paint chips and scrapings. If improperly disposed of, such wastes can contaminate water running off your property. To avoid harm to the land, plant, and animal life, follow the following simple guidelines:

- From the very start of your project, take care to minimize painting waste by buying only as much paint and as many materials as you will need. Not only will this generate less waste, but it will decrease the amount of leftover materials that you will be responsible for proper disposal.
- Avoid generating large amounts of waste water by wet scraping rather than pressure washing.
- If you must, pressure wash homes and buildings only if they were built after 1978. Houses built prior to 1978 are likely to have lead-based paints, which should not be washed down the storm drain!
- Divert wash water from storm drains. Consider placing gravel bags or filter cloth at storm drains to capture paint wastes prior to entering the storm drain system. Check and maintain at regular intervals to ensure paint wastes are not entering the storm drain system. If possible, buy only disposable brushes, rollers and trays to avoid the use of solvents at the conclusion of the job.
- Brush as much paint as possible from brushes before rinsing them.
- Avoid using oil-based paints. If possible, use latex products.
- Never wash brushes and equipment in the gutter. Instead, dispose of latex paint waste water by pouring it into the sanitary sewer.
- Drain and recycle excess paint from spray equipment prior to washing equipment with water.
- Dispose of disposable brushes in the trash. Avoid throwing away any items that still have paint on them.
- Recycle empty spray cans and paint cans in your recycling cart.
- Excess latex-based paint can be recycled. See page 5 of this guide for more information.
- If possible, reuse paint thinner. Let any particles left in the thinner settle out, then pour off the clear thinner for re-use. Dispose of contaminated thinner as you would other hazardous wastes.

For more information about stormwater pollution, contact the Public Works Department at 757-5686.

Did you know that detergent as low as...

- 2 parts per million can cause fish to absorb twice the amount of chemicals as normal?
- 5 parts per million will kill fish eggs?
- 15 parts per million cause death in most fish species?

Storm Drain Marker Installation Program

Stormwater pollution can be extremely harmful to the health of the plants and animals with which we share this planet. Please help us keep our watershed clean.

To remind everyone about the importance of preventing pollution of our stormwater, the City has installed storm drain inlet markers near each storm drain. These markers are easy to install. If you, your group, or organization would like to participate in this pollution awareness program, please contact City of Davis Public Works at (530) 757-5686.



Storm Drain Marker

POLLUTION PREVENTION

The Davis Wetlands

The 400 acre Davis Wetlands Project is part of a growing effort throughout the Central Valley to preserve and restore native habitats and the wildlife they support. The Wetlands is one of the City's most valuable open space resources. It provides wildlife habitat, flood control, waste water and stormwater treatment, recreation, and environmental learning opportunities.

Until the turn of the century, this area was seasonally flooded by the rise of the Sacramento River and its tributaries. Low lying parts of Yolo County surrounding Davis were marshlands most of the year, and were a key wintering location for countless waterfowl migrating along the Pacific Flyway, one of four major migratory routes for North American birds.

In the Central Valley, about 95% of the original wetland habitats were lost as levees were built for flood control and lands were converted to urban and agricultural uses. The Yolo Basin is considered a prime location for wetlands restoration because of its potential to recover some of the historical habitat and reestablish important wintering grounds for waterfowl and migratory birds.

The public and private sectors are recognizing the value of wetlands and have begun to work cooperatively to rebuild and preserve them. The Davis Wetlands Project was envisioned, designed, and built by a dedicated team of volunteers and professionals. As the Davis Wetlands mature, residents and visitors alike will be able to enjoy its benefits for years to come.

How the Wetlands Work

Water levels in the tracts are regulated seasonally. In March and April, the water levels are drawn down for the summer to expose seasonal benches and mudflats. This creates foraging habitat for shorebirds. Also, by keeping water off the benches, mosquitoes are discouraged. In the fall and winter months, increased stormwater flows are directed to the wetlands. The higher levels inundate the benches, creating shallow habitat for waterfowl and wading birds. The vast areas of open water provide plenty of habitat for wintering waterfowl to raft and avoid terrestrial predation.

The Davis Wastewater Treatment Plant treats water at the secondary level that is completely compatible with the Wetlands environment. The biological processes started at the Plant continue in the Wetlands, where suspended solids and organics settle out of the water or are absorbed by plants and micro-organisms. Storm water is conveyed directly to the Wetlands from Davis urban areas. The biological processes that first take place in Davis' drainage ponds continue in the Wetlands to help enhance the quality.

The Wetlands environment is monitored continuously to ensure its quality. Water, soil, invertebrates, and bird eggs are frequently tested for potentially harmful constituents such as selenium. You can help keep the Davis Wetlands healthy by making sure only clean rainwater goes into storm drains.



Wetlands Site (circa 1990)



Post construction (2006)

POLLUTION PREVENTION

Managing Pests without Harming People, Pets and the Environment

The City of Davis Public Works Department is participating in a national award winning water pollution prevention program called “Our Water Our World” (OWOW). This program creates a partnership between the City and local retail stores, including Davis Ace Hardware, CVS Pharmacy East Covell, and Redwood Barn Nursery, that sell pest control products to the public.

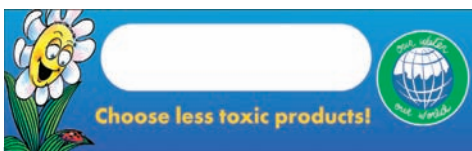
Studies have shown that pesticide application by homeowners is a primary source of pesticide runoff from urban areas. This runoff flows down storm drains and is carried to our creeks and waterways. The OWOW program encourages the general public to use less-toxic pest control products and methods, reducing the amount of pesticides that could potentially end up in local waterways.

Stores participating in the OWOW program provide fact sheets (see below) on preventing and managing individual pests with the least impact on the environment. Colorful shelf talkers mark the products on the shelves that are less-toxic or non-toxic to use in the garden.

The OWOW program website, www.ourwaterourworld.org, is highly informative, and includes an “Ask Our Expert” feature. Here, you can ask questions about managing pests and receive a personal reply from the staff at the Bio-Integral Resource Center in Berkeley within 24 hours (the Center is a nonprofit organization that has been offering pest management advice worldwide for over 25 years).

Other resources found on the website include:

- 15 fact sheets on managing pests in English and Spanish
- Less toxic product lists
- Proper use and disposal of pesticides
- Bug identification
- “Pests Bugging You?” wallet guide which also informs you about what products you can use and what products you should avoid using
- Valuable links to other environmental resources.



Shelf Talkers are little tags placed in front of a product to help identify those that are non-toxic or less toxic than conventional pesticides. The product name is listed in the white space.



For more information about less-toxic and non-toxic pest control, look for the OWOW brochure rack at Davis Ace Hardware, CVS Pharmacy East Covell, and Redwood Barn Nursery, or visit www.ourwaterourworld.org.

INTEGRATED PEST MANAGEMENT

Integrated Pest Management (IPM) is a decision-making process to determine pest levels and tolerance thresholds and combines biological, cultural, physical, and chemical tools to maximize health, environmental, and financial risks. IPM focuses on long-term prevention of pests and their damage and uses extensive knowledge about pests, such as infestation thresholds, life histories, environmental requirements, and natural enemies to compliment and facilitate biological and other natural control of pests. Pesticides are used only if truly necessary and are selected to be effective against a specific pest while minimizing risks to you, your family and pets, wildlife, beneficial insects, and our environment.



Why not use baits and pesticides?

Each year, private homeowners and businesses alike purchase rodent baits to keep their properties free of mice, rats and gophers. These pesticides, ranging from powders, sprays and pellets, are not only limited in their effectiveness, but also toxic, particularly to children and pets. Household rodent bait use may cause adverse health effects. Biological controls such as neighborhood owls and bats can decrease the need for these toxic remedies by providing a natural and safe control for insect and rodent pests.

Not only will your family and your pets benefit from integrated pest management, so will the environment. By relying on natural pest control methods, more toxic pesticides are kept out of your yard, storm drains and waterways. Whenever you use rodent bait or poison either outside or inside your home, remember where the bait can travel. See the Pollution Prevention section of this guide for more information.

What is a Pesticide?

A pesticide is any substance or mixture of substances intended for preventing, destroying or repelling any pest (insects, mice and other animals, unwanted plants, fungi, bacteria and viruses etc.). Pesticides that are used in everyday life can actually be harmful to people, animals, and the environment. Certain pesticides have been known to cause birth defects and serious health problems in young children and pets. Integrated Pest Management uses fewer pesticides and is a safer and smarter way to secure your home from pests.

Choosing a Pest Management Company

Because the initial costs are typically higher, companies that haven't adopted less-toxic approaches may believe they cost more. However, less-toxic pest management pays for itself in the long term because it treats the underlying problem (why you have pests); conventional controls typically treat just the symptoms.

Ask before you hire If you are considering hiring a company to help you deal with your pests, tell them that you are concerned about the use of pesticides and would like them to use only less-toxic pest control methods. Find out to what extent a company you're considering uses non-chemical approaches to pest control and how it would approach your particular problem. **Here's what to look for:**

Approach Ask if they are willing to do pest control without sprays. Their response will help you determine their philosophical approach to pest control. Discuss various methods and determine if the company provides less-toxic options, such as those discussed below. A company that offers less-toxic pest control or IPM should use conventional chemicals for a small percentage of their jobs.

INTEGRATED PEST MANAGEMENT

Inspection Ask the company to find out how the pests are entering, where they are hiding, what's attracting them, and what they are eating. A less-toxic approach will begin with a thorough inspection to determine why you have a pest problem, as well as the extent of the problem. The key to effective pest control is detailed information about the pest. The company should also ask you whether anyone living in the house is pregnant, less than one year old, asthmatic or elderly, and whether you have pets.

Habitat modifications Ask what the company will do to prevent a re-infestation of the pest. Since pests need food, water, and shelter to survive, eliminating or reducing one of these via habitat modification (for example, by caulking cracks, screening holes, and replacing door thresholds) will reduce the pest population.

Physical controls can be used to trap, kill or vacuum up pests, or use barriers.

Biological controls used by some companies will use other organisms, such as beneficial nematodes or lacewings, to control certain pests.

Horticultural controls involve how the yard and garden are cared for. For example, plants produce less top growth if fed a slow-release or organic fertilizer, making them less attractive to certain pests. Good horticultural practices are important, since a healthy lawn and garden will naturally resist or outgrow most pest damage.

Chemical controls Ask how the company makes decisions about when, where, and what (if any) pesticides to use. A less-toxic pest control service will not spray routinely and, if it sprays at all, will only spray where the pest is a problem. Chemical sprays should not be used to prevent infestations. Look for a company that chooses less-toxic chemicals such as borates or boric acid, diatomaceous earth (DE), insecticidal soaps, horticultural oils, and those contained in bait stations.

Monitoring is important because when less-toxic pest controls are used, insects will die back gradually instead of all at once, as they do with conventional pesticides. The company should place monitors around the home and check them regularly to make sure the control is working and change it if necessary.

Claims Be cautious if a company claims it uses "safe pesticides" or "safe chemicals". Pesticides can be applied safely, but no pesticide (even a less-toxic one) is entirely safe. "Odorless" does not mean safe. Be cautious of claims that a company can control "ALL insects". If they claim to control all insects, you can be sure they are using a broad-spectrum pesticide that will kill even beneficial insects such as ladybugs, honeybees, and butterflies.

Doing Your Part

For less-toxic pest control to work, you must do your part. If the pest control company makes recommendations about cleanup, home repairs, or other steps you should take to help prevent pest problems, make sure you follow their instructions.



INTEGRATED PEST MANAGEMENT

Contracts Be cautious of the monthly service contract. A less toxic approach SHOULD include regular monitoring of pest populations but NEVER calendar applications of pesticide whether or not you have a pest problem. Do not authorize any pest treatment without reading and signing a detailed written contract.

Weed Control

Weeds are simply plants that are undesirable where they are growing. They take the light and nutrients needed by other plants which results in limited growth of the wanted plants. Weeds are known to be unsightly, however some weeds are used as garden plants. There are other ways to deal with weeds besides just spraying a herbicide. Listed below are some practical ways to get rid of weeds without using chemicals.



Mulching

Mulching is one of the simplest and most beneficial practices you can use in the garden. Mulch is defined as a protective layer of material that is spread on top of the soil. Examples of mulch include: grass clippings, straw, bark chips, stones and plastic.

Mulch provides these benefits:

- Protects the soil from erosion
- Reduces compaction from the impact of heavy rains
- Conserves moisture which reduces the need for frequent watering
- Maintains a more even soil temperature
- Prevents weed growth
- Keeps fruit and vegetables clean
- Keeps your feet clean, allowing easy access to your garden even when it is damp
- Provides a “finished” look to the garden.

Mulch can be used as an alternative to fertilizers, which can be harmful to the environment when they are washed down a storm drain and enter our waterways. Although mulch is usually more environmentally friendly than fertilizers, it should not be washed out of the landscaping area either, or it will also become a pollutant in the waterways. When using mulch or bark in landscape areas, make sure that excess can be contained within the landscape area. Use in areas that have raised borders above the level of the soil.

Flame Weeding

Flame weeding is used as an alternative to harmful pesticides. It works by killing the weeds with an intense wave of heat. All plants are made up of tiny cells that are filled with water. By delivering a thin blast of heat directed at the stalk and young leaves, the heat will boil the water inside the cell, rupturing them. After this happens, nutrients and water for the plant cannot move from roots to leaves and results in the plant withering and eventually dying. By destroying the cell structure, the weed will not put energy towards growth. Flame weeding is nearly 100% effective on broad leaf weeds that are caught early.



Flame weeding is done by trained City staff on City properties.

INTEGRATED PEST MANAGEMENT

Grazing

Grazing is a component of the IPM program by the Mace ranch owl sites. Grazing uses animals such as sheep, cows, goats or horses to eat weeds, reduce weed seed production and lowers the risk of fire hazards. Grazing also supports local agriculture.



Soil Solarization

Soil solarization is a non-pesticidal method of controlling soil borne pests by lacing UV resistant plastic sheets on moist soil when the weather is warm. The plastic sheets allow the sun's radiant energy to be trapped in the soil, heating the top layer of soil. Solarization during the hot summer months can increase soil temperature to levels that kill many disease-causing organisms (pathogens), nematodes, and weed seeds and seedlings.



It leaves no toxic residues

and can be easily used on a small or large scale. Soil solarization also improves soil structure and increases the availability of nitrogen and other essential plant nutrients.

Other examples of IPM in weed control:

- Sheet Mulching—cardboard or layers of newspaper are placed on the ground and covered by wood chip mulch.
- Mechanical Controls—hand weeding, mowing or weed whacking.
- Irrigation Management—irrigates target areas only to reduce weed growth, herbicide use and water runoff.



Newspaper sheet mulching is an effective and non-toxic way to subdue weeds. Just lay thick layers of overlapping newspaper on damp soil, wet the newspaper to keep it in place and then apply organic mulch. For tougher weeds, use cardboard.

INTEGRATED PEST MANAGEMENT

Commons Pests in Davis

Hackberry woolly aphid

This aphid showed up on Chinese hackberry trees in Davis and other Sacramento Valley cities in 2002. The fuzzy white insects, which are found on the tops and bottoms of the leaves, cause the leaves to drip sticky liquid over everything beneath them. This sugar excretion draws ants, and a black mold may grow on surfaces



covered with it. Large populations of aphids don't seem to weaken or stress the trees, but the amount of sticky goop is a major nuisance.

Inspect leaves to be sure that aphids are the cause of annoying honeydew. Because plant health apparently is not threatened, take action only where annoyance from honeydew cannot be tolerated. Providing trees with appropriate soil moisture is the single most important action to promote tree health. Avoid fertilizing hackberry unless nutrient deficiency has definitely been diagnosed. Excess nitrogen has been shown to increase aphid numbers on certain other plant species. A forceful stream of water will dislodge and kill some aphids and wash away honeydew on plants that are small enough for hosing to be practical.

Classical biological control through introduction of natural enemies is one long-term possibility for managing this pest. Predators such as the lady beetle, syrphid flies, and lacewings feed on aphids. However, in many California situations they currently do not provide adequate biological control. Nevertheless, avoid spraying hackberry with broad-spectrum, persistent insecticides that kill natural enemies, in part because citricola scale, another major hackberry pest, is well controlled by parasites in at least some locations.

Several systemic insecticides are effective at controlling wholly aphids. Systemic insecticides are absorbed into the tree and kill insects that feed on it. Contact a pest control contractor for more information.

There is no organic pesticide alternative for large trees. Spraying smaller trees with insecticidal soap will kill some aphids and rinse off the goop (actually, it is water soluble so just hosing it off will rinse it off). But with thousands of aphids present surfaces will just be covered again within a day or so. Ultra-fine oil sprays will kill more aphids than soap, but spraying larger trees is impractical. Natural enemies will probably give some level of control eventually, but releasing ladybugs isn't effective.

If your neighbor doesn't treat his tree, aphids will fly from his tree to yours, feed, and die. It isn't likely to significantly increase the sticky mess you deal with, because they won't have time to reproduce.

INTEGRATED PEST MANAGEMENT

Rats

Here in Davis the roof rat or black rat (*Rattus rattus*), poses both a health and safety hazard. Besides the black plague, roof rats may spread other diseases to humans like murine typhus, leptosporosis, salmonellosis, trichinosis and rat bite fever. They can also spread diseases to domestic animals and are suspected of transmitting ectoparasites from one place to another. They eat and contaminate stored food and feed and will gnaw on wiring (posing a fire hazard), wood, and tear up insulation for nesting material. Rats will feed on fruits and vegetable in many gardens as well as damaging young trees by feeding on their bark. Pet food and compost piles that are not damp and turned regularly are common food sources for them in our neighborhoods.



Adult roof rat

Prevention through exclusion and habitat modification can provide long term control by preventing infestation. To rodent-proof a home or building, all possible entry points must be sealed, especially where pipes or utility lines enter a building.

- Seal openings to the outside of a structure that are $\frac{1}{2}$ inch wide or greater with concrete mortar, steel or copper wool or metal flashing.
- Cover attic and foundation vents with $\frac{1}{4}$ inch wire mesh or heavy wire screen.
- Use rat guards made from sheet metal 18-24 inches wide to prevent the rats from climbing.



Example of rat proofing tile roofs.

Habitat modification makes an area less suitable and less attractive to roof rats. Improving general sanitation is a big step towards eliminating food sources:

- Secure garbage in rodent proof containers.
- Store materials properly.
- Harvest fruits and vegetables in a timely manner and pick up fallen fruit promptly.
- Remove attractants such as pet food, bird feeders and standing water.
- Compost in closed compost containers, or turn your compost pile regularly and keep the pile moist.

Eliminate or reduce protective cover that these rodents use:

- Prune shrubs so that the ground below is visible.
- Mow, trim or remove ground cover plants that are over 1 foot in height.
- Stack firewood or lumber at least one foot away from walls and fences and at least 18 inches off the ground.

Roof rats travel along vines, tree branches, fences and utility wires. Eliminating these aerial pathways can dramatically reduce roof rat travel.

- Eliminate or severely prune back vines growing on buildings or fences.
- Remove tree limbs that overhang roofs.
- Prune trees so that the branches do not touch fences, overhead wires or branches of adjacent trees.
- Prune skirts of trees so that branches do not hang down to the ground.

INTEGRATED PEST MANAGEMENT

Biological Controls

Barn Owls

Yolo County is one of many regions in California that is a haven for native raptor species. In particular, areas in and around the City of Davis are well-established habitats for owls including the Barn Owl.

You can invite a barn owl into your neighborhood by building an owl box. Barn Owl boxes are rectangular wooden shelters in which the owls will nest and roost. The owls will snuggle together on the box's floor, and will remain there during most of the day. When night falls, Barn Owls will leave their box in pursuit of rodent prey, which ranges from mice to gophers, returning to the box to share scraps with their offspring.



One nest of six young Barn Owls and two adults may consume as many as 1,000 small mammals in a single nesting season.

Bats

Yolo County is one of many regions in the Central Valley that is a haven for native bat species. Areas in and around the City of Davis offer excellent habitat for bats, in particular, the Mexican free-tailed bat.

Mexican free-tailed bats eat insects ranging from moths and mosquitoes to beetles and ants, and they are one of the most important controllers of agricultural insect pests. In one night alone, a colony of Mexican free-tailed bats can consume as much as 250 tons of insects!

You can invite bats into your neighborhood by building a bat box. Bat boxes are rectangular wooden shelters in which local bats will roost. Inside of each box, they will snuggle among the constructed wooden crevices, hanging upside down by their feet. During the day, the bats will remain in the box, likely sleeping. They will emerge from their box roughly 15 minutes after sundown, and fly into the night to hunt for insect meals. Mexican free-tailed bats are not easily disturbed by children or pets so long as their box is out of reach. They are neither messy nor noisy.



Photo by David Rosen

Bats are fast flying creatures. They can reach flight speeds of 40 to 60 miles per hour, traveling nearly as fast as cars on the freeway!

One of the many benefits of having neighborhood bats is a local source of natural fertilizer. Bat excrement, or guano, is organic and tremendously rich in nutrients and minerals. Mixed in low concentrations with soil or irrigation water, it can be used to enhance the growth of lawns, vegetables, landscape shrubs and flowers. Care must be taken not to over fertilize as, like all fertilizers, it may damage plants and/or pollute local waterways.

Help us to protect your wildlife and water resources for future generations. For more information about how you can help prevent water pollution call the Environmental Compliance Coordinator or the Wildlife Resource Specialist at (530)757-5686.

URBAN WILDLIFE

Living with Wildlife

Davis has many wonderful mature trees, densely vegetated greenbelts and native open space areas. These areas are attractive to a wide variety of wildlife species. Having wildlife live so close to home is a great way to watch and enjoy our fellow Earthlings. However, wildlife can sometimes cause problems at home. Reducing conflict with wildlife at home takes patience and persistence, but in the end both you and your wild neighbors will be happy and healthy. Below are some common urban wildlife species and ways to help reduce conflict at home.

Squirrels

Much joy can be had watching these busy little guys romp around. However, like their rodent cousin the rat, squirrels can cause damage around the house and in the garden.

- Do not feed squirrels.
- Seal openings to the outside of a structure that are $\geq \frac{1}{2}$ inch wide with concrete mortar, steel or copper wool or metal flashing.
- Cover attic and foundation vents with $\frac{1}{4}$ inch wire mesh or heavy wire screen.
- To protect fruit and nut trees, use squirrel guards made from sheet metal 18-24 inches wide around the trunk to prevent them from climbing up trees.
- Deter squirrels by cutting back vegetation at least 8 feet from trees you wish to protect.
- Prevent ground squirrels from tunneling into your garden by installing wire mesh 1-2 feet below plant beds.
- Motion activated sprinklers (ex. Scarecrow®) have proven very effective at deterring squirrels and other unwanted animals.



Raccoons

Raccoons, like humans, are constantly tending to the basic needs for food and shelter. They find both near our homes. While they may appear to be just curious, they are probably in search of food. Raccoons are usually not aggressive unless sick, cornered, mating, or with young.

- Do not feed raccoons.
- To raccoon-proof a garbage can, fasten the lid securely with rope, bungee cords, chain, or even weights.
- Sprinkle lawns or planters with cayenne pepper to discourage grub hunting.
- Motion activated sprinklers (ex. Scarecrow®) have proven very effective at deterring raccoons and other unwanted animals.
- Control grub populations so that raccoons will not be drawn to your lawn in the first place. Organic grub control products work very well.
- Fasten bird netting over garden plants. It is easier for raccoons to dig elsewhere than to remove the netting.



URBAN WILDLIFE

- Improve existing fences by enclosing any open area between the bottom of the fence and the ground, or install fence extenders facing outward at a 45-degree angle on top of each post, with two or three strands of wire strung between them.
- If the area is fairly small, try sinking jars filled with ammonia into the ground, with sponges as wicks. Be sure the jars are anchored in the soil to prevent spilling. Or try hanging socks filled with mothballs.
- Serious gardeners might consider an electrified fence. String ordinary, 2-millimeter galvanized wire along insulator posts around the perimeter. The wire should start about 8 inches above the ground to prevent crawling underneath and lines should be spaced close together so animals cannot reach through. Connect the wires to an approved fence charger with alternating current not exceeding 12 volts, which can be purchased relatively cheaply at feed stores. Be sure to check with the Building Department for installation guidelines and/or limitations.

Wild Turkeys

Turkeys can be fun to watch and they help to keep pests like slugs and snails reduced. However, they can also tear up landscaping in search of food and pose a traffic hazard when crossing busy streets.

- Do not feed turkeys.
- If turkeys begin feeding under hanging bird feeders, remove the feeders until the turkeys leave the area.
- If turkeys are causing problems in your yard, install motion-detecting sprinklers.
- Wild turkeys typically will not enter yards with dogs.
- If confronted by a wild turkey that has lost its fear of humans, an open umbrella may help steer it out of your path.
- Depredation permits are required to kill wild turkeys that are causing property damage. To get a depredation permit, contact the local Department of Fish Game office (916-358-2900).



Crows

Like turkey and other urban wildlife, crows can be very interesting to observe. They are typically spread out across the region during the nesting season but can form large, noisy and messy roosting colonies during the fall and winter. To help prevent a crow colony from habituating to your tree:

- Install visual deterrents, such as strips of metallic ribbon, old CDs or DVDs or predatory mimics (ex. Terror Eyes®), to upper branches of roost tree.
- Spray a high pressure hose up into tree at roost time to keep crows on the move. This may need to be done nightly to eventually break crow site fidelity.



URBAN WILDLIFE

Sparrows, Finch, Swallow, Rock Pigeon, and other structure nesting birds

Sharing your home's roof or eaves with a family of nesting birds can be a wonderful experience, however, nests and young birds can be messy. It is important to note that bird nests are protected by law. A homeowner with an undesirable nest would need to wait until after the breeding season to remove a nest should they discover one with eggs. To prevent unwanted nests, employ deterrents that prevent the nests from being built in the first place.

- Install visual deterrents, such as strips of metallic ribbon, old CDs or DVDs or predatory mimics (ex. Terror Eyes®), to locations where birds build nests.
- Install small wire mesh along eaves or terracotta style roofing tiles.
- Be vigilant about swallow nest building activity in the early spring. Use a hose to wash down partially constructed nests on a daily basis.



Wildlife Friendly Landscaping

Besides conserving water and requiring less chemical fertilizers and pesticides, native and near native trees, shrubs, grasses and flowers provide the food and cover that our wild friends are adapted to. Consider some of these species during your next landscape project (from UC Davis Arboretum All-Stars):



VINE HILL MANZANITA (*Arctostaphylos densiflora* 'Howard McMinn')
Beautiful dark red, smooth bark, glossy green leaves, and charming clusters of bell-shaped, pinkish-white flowers in winter add year-round interest to this evergreen native shrub. It is one of the few manzanitas that will tolerate heavy garden soils.



OREGON GRAPE (*Berberis aquifolium*)
Evergreen, spreading shrub, 2 ft. to 6 ft. tall depending on the cultivar. Spiny, holly-like leaves and bronzy new growth. Will grow in sun or shade, and is adapted to infrequent watering. Fragrant yellow flowers in spring are followed by blue fruit in winter.



RAY HARTMAN CALIFORNIA LILAC (*Ceanothus* 'Ray Hartman')
Early spring brings a spectacular flush of bright blue, honey-scented flowers to this evergreen native shrub. One of the best ceanothus for garden use, it can tolerate summer irrigation and can be trained as a small tree. Its flowers are a nectar source for beneficial insects.



WASHINGTON HAWTHORN (*Crataegus phaenopyrum*)
This mid-sized deciduous tree offers many seasons of interest with profuse white spring flowers, ornamental fruit clusters, and brilliant orange, scarlet, or purplish foliage in fall. Its graceful open limb structure makes it an attractive patio specimen.

URBAN WILDLIFE

CALIFORNIA FUCHSIA (*Epilobium canum*)

Spreading ground cover, somewhat invasive, good for low water landscapes. Beautiful red flowers produced profusely, attract hummingbirds. Best with full sun and infrequent irrigation. Cultivars vary from 4 in. to 4 ft. in height, are deciduous to evergreen, silver grey to green in color, and have red to white flowers.

SANTA BARBARA DAISY (*Erigeron karvinskianus*)

This tough, adaptable perennial blooms over a long period with dainty, pinkish-white flowers. Good in containers or for trailing over a wall, it spreads by seed in the garden.

CORAL YUCCA (*Hesperaloe parviflora*)

This striking plant adds a strong architectural note to the garden with its spiky leaves and long stalks of dark coral-pink flowers. It is especially heat and drought tolerant and can take full sun, even reflected heat. The flowers are attractive to hummingbirds.

OTTO QUAST SPANISH LAVENDER (*Lavandula stoechas* 'Otto Quast')

The best of the Spanish lavenders for this area, with a compact form, large flowers, and dark flower color. The gray foliage is attractive all year, and the fragrant flowers can be used for sachets, perfumes, or soaps. It is a good container plant for a sunny location.

JAPANESE SILVER GRASS (*Miscanthus sinensis* (dwarf varieties))

Many varieties of this highly ornamental grass are available, with different patterns of leaf variegation and a range of sizes. It is easy to divide and propagate, and the flowers are good for arrangements fresh or dried. The leaves turn vivid reds, oranges and yellows in fall.

MEXICAN DEERGRASS (*Muhlenbergia dubia*)

A striking accent plant for a low-water garden, this clump-forming grass has dense tufts of light green, fine-textured leaves. It requires little maintenance other than cutting to the ground in winter. Like many grasses, it attracts beneficial insects.

GOLDEN CURRANT (*Ribes aureum*)

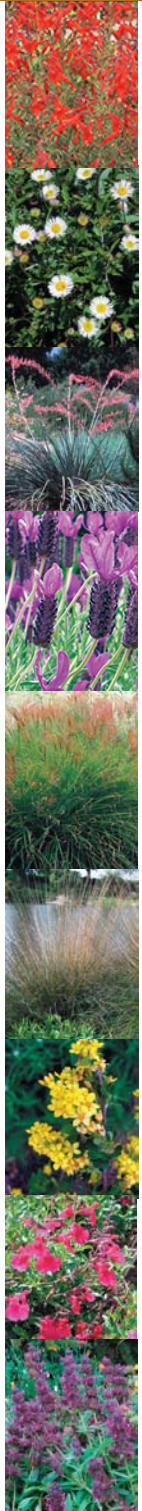
This deciduous native shrub has beautiful golden flowers with spicy fragrance in late winter and early spring. A good choice to plant under native oaks.

AUTUMN SAGE (*Salvia greggii* and *Salvia x jamensis*)

This tough, adaptable evergreen shrub produces showy red flowers from spring through fall. The foliage has a pleasant citrus scent. Hummingbirds and butterflies love the flowers.

HUMMINGBIRD SAGE (*Salvia spathacea*)

This tough, drought-tolerant, native evergreen perennial has striking spikes of red flowers in spring and fall. The leaves have a pleasant fruity fragrance. Excellent groundcover for dry shade.



URBAN WILDLIFE

Wildlife Viewing

The City of Davis' numerous open space areas, vast green belt system, stormwater detention basins and maturing urban forest provide excellent habitat for a variety of common and rare wildlife species. Below are some areas that you may want to explore and observe our fellow Earthlings in action (please respect the wildlife by keeping pets on a leash and staying on designated access paths).



Wildhorse Agricultural Transition Area

Located north of the Wildhorse Golf Course, this area is easily accessible by foot or bicycle. Native grasslands and remnant walnut orchards attract species such as the burrowing owl, logger-head shrike, Swainson's hawk and many migratory songbirds.

Local Stormwater Detention Basins

Three of the five main detention basins have been enhanced to support wildlife. The West (b/t Covell and Arlington), Julie Partansky (F and Anderson Streets) and Core Area (2nd Street) Ponds support many species of shorebirds and waterfowl. You are also likely to see a muskrat or two sliding across the water surface.

Parks and Greenbelts

The lush vegetation and mature native trees within the many parks and greenbelts support common urban species. Birding in these areas will provide viewing of magpie, crows, scrub jays, house finch, swallows, cedar waxwing and robins. The Putah Creek parkway provides nice riparian woodland habitat for species such as woodpeckers, swallows, western gray squirrels, skunks and red fox. The connectivity of the greenbelt system helps facilitate the seasonal movement of numerous species of migratory songbirds. Barn owl, great-horned owl, and western screech owl also use these areas to nest and forage.

Davis Wetlands

This constructed wetlands project is located approx 1 mile east of the Davis Wastewater Treatment facility and utilizes treated wastewater and stormwater to create wildlife habitat. The 400-acre site was previously agricultural land and is now being returned to a managed native California wetlands ecosystem that includes oak riparian woodlands and native grasslands. See the Pollution Prevention Section for more information.

South Fork Preserve

Located on the South Fork of Putah Creek near Mace Blvd, this preserve area provides a great example of riparian floodplain restoration. Showcasing native trees, shrubs and grasses, the South Fork Preserve supports a variety of riparian woodland and grassland species. A visit to this area will likely yield an abundance of nesting and foraging raptors, woodpeckers, swallows, flycatchers, sparrows, and wood ducks. The preserve is open daily from dawn to dusk.

Yolo Wildlife Area

Although this area is not managed by the City of Davis, it is worth mentioning here. This valuable resource showcases the functional relationship between agriculture and habitat. Thousands of acres of wetlands and seasonally flooded upland habitat can be found here. Huge numbers of waterfowl and shorebirds occur during the winter, whereas raptors, and songbirds teem during the summer. Keep an eye out for the federally threatened giant garter snake. Join the Yolo Basin Foundation for a wonderful lecture about bats, with an evening-capping spectacular of the 100,000+ Mexican free-tailed bat roost fly out. For more information visit www.yolobasin.org.




ENVIRONMENTAL TOUR

An Environmental Tour of Davis

All of the locations listed here are referenced on the map on pages 46-47.

- 1. Agricultural Buffer Areas** The Wildhorse and El Macero Agricultural Buffers are great examples of land use planning. These buffers were restored with native vegetation to support wildlife and provide an essential transition area between residential and agricultural land. Go north on Pole Line Rd. to access Wildhorse Ag Buffer. El Macero Ag Buffer is east of the El Macero subdivision and is accessible via Cowell Blvd. For more info call Parks and General Services at 757-5656. 
- 2. California Raptor Center UC Davis Campus** Located off Old Davis Rd. on the levee road just after Putah Creek, the center includes a small museum and short self-guided trail. Open Mon-Fri (9am-4pm, closed for lunch), Sat. (9am-12pm), and closed on holidays. Donations requested (752-6091). 

- 3. Davis Waste Removal (DWR)** 2727 2nd Street, 756-4646. Aside from garbage, recycling and yard waste collection, DWR provides a weekly street sweeping service to Davis. DWR is open to redeem your CRV deposit Mon-Fri (9:30am-2pm) and Sat (8am-4pm). Free drop off of scrap metal, used motor oil and filters, and other recyclables is available 24-7. Call the facility to arrange a tour. For more information on recycling, call 757-5686.
- 4. Muir Commons Co-Housing** Built in the early 1990's this is one of the first co-housing communities in the United States. Tours are by appointment only. E-mail tours@muircommons.org or call 758-5202.
- 5. Multi-Modal Transportation Facility** (Southern Pacific Depot) 826 2nd Street, near the corner of G and 2nd Streets. The Depot has recently been restored and refurbished as a multi-modal facility to accommodate a variety of transportation users. There are currently facilities for rail ridership and Amtrak commute lines (758-4220), both of which interface with local pedestrians, cyclists, and automobiles. 
- 6. West Area, Core Area, and Julie Partansky Ponds** These constructed wetlands were designed as storm water retention ponds and recreation areas. The ponds provide up close observation of numerous water fowl and shorebird species, while improving water quality by removing trash and sediment. 

- 7. Pervious Concrete Parking Lot** The parking area for the Explorit Science Center at Mace Ranch Park (3141 5th St.) was created using porous concrete. This alternative to asphalt allows rainwater to percolate into the ground below rather than run off into the watershed, benefiting both trees and storm water quality. For more information contact the Public Works Department at 757-5686. 
- 8. Residential and Business Stormwater Pollution Prevention Demonstration** A demonstration of ways homeowners and businesses can prevent pollutants from washing off their property. From organic fertilizers using worms, to redirection of air conditioning condensation for landscape irrigation, every little effort helps. Located in the Public Works Corporation Yard. Tours by appointment only, call 757-5686.
- 9. South Fork Preserve** This riparian and oak savanna restoration site showcases many native grasses, shrubs, and trees that once dominated the Central Valley. The site is located 1.5 miles south of Davis on Mace Blvd. on the South Fork of Putah Creek. Open daily from dawn until dusk. For tour information, call the Parks and General Services Dept. at 757-5656. 


ENVIRONMENTAL TOUR



Wildlife viewing opportunities.



Bike accessible or best experienced by bike.

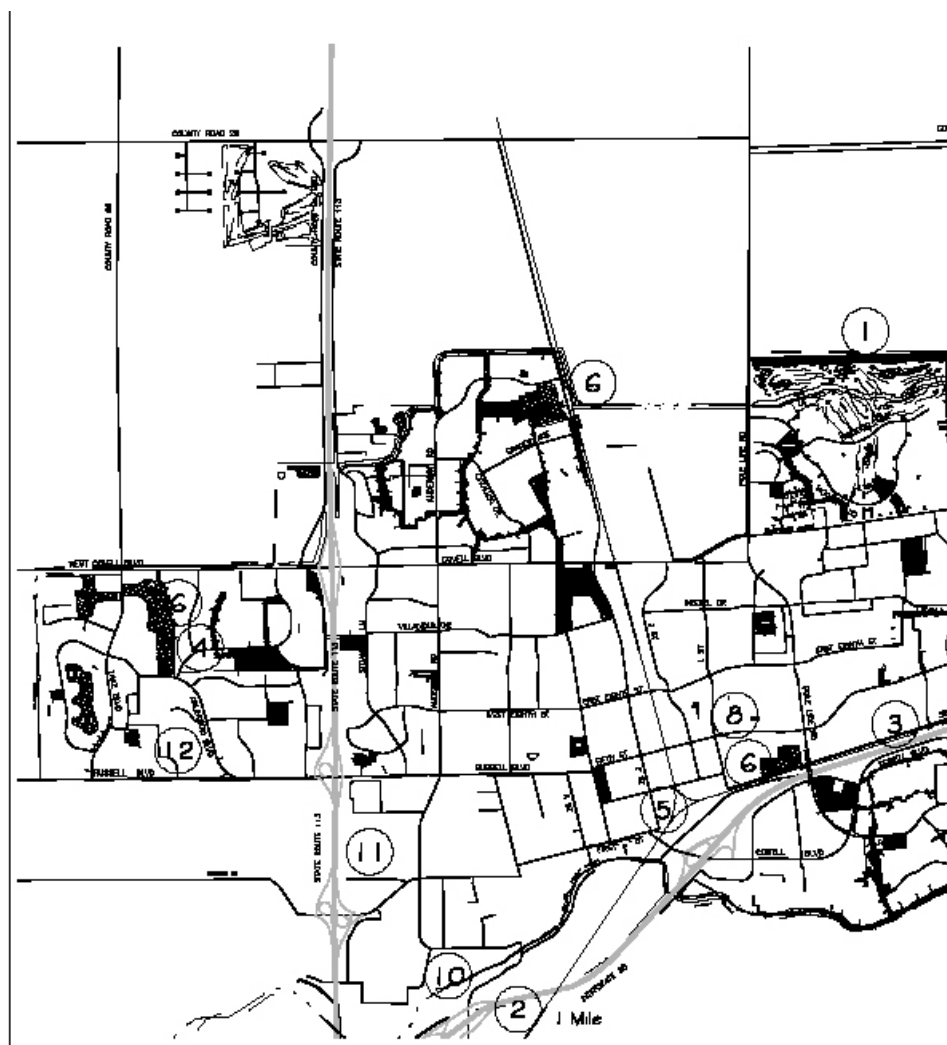
- 10. UC Davis Arboretum/Arboretum Headquarters** TB32 La Rue Road. Located along 2 miles of Putah Creek on the south side of the UC Davis campus. The arboretum is open all day, every day, free of charge. It features trees and shrubs from around the world as well as many native and drought-tolerant species. Call ahead (752-4880) to find out about upcoming Sunday docent tours and other events.
- 11. UC Davis Student Experimental Farm** The Experimental Farm offers opportunities for learning about sustainable agriculture, seed-saving techniques, organic farming, and aquaculture. The Farm is located west of UC Davis Rec Pool. Call ahead for tours (752-7645).
- 12. Village Homes** Village Homes was the first solar subdivision in the United States. Built in Davis in the 1970's, Village Homes is a true pioneer in sustainable planning, including efforts to improve residential storm water runoff. For tours, contact local government commission (lgc@lgc.org). A fee may apply. Village Homes is located at the intersection of Russell and Arlington Blvd.
- 13. Yolo County Central Landfill** The landfill is open Monday-Saturday (6:30am-4pm) and Sunday (9am-5pm). Tours can be arranged by calling 666-8729. To get to the landfill take Pole Line Rd. (Rd. 102) north and make a right on Road 28H. The landfill features a methane recovery facility, and free recycling drop-off for scrap metal, used motor oil and filters, electronic waste, and other recyclables.
- 14. Water Pollution Control Plant and Davis Wetlands** East of the county landfill on Road 28H, the treatment plant processes 5.6 million gallons per day using a mix of traditional and natural methods, including the largest treatment wetlands in the state, which utilize treated wastewater and stormwater runoff. The wetlands provide habitat for a variety of wildlife. Tours are offered the first Sat. of the month. To tour the plant, call 747-8295. For wetlands tours and more info, call the Public Works Dept. at 757-5686.
- 15. Yolo Wildlife Area** The 16,000-acre Yolo Wildlife Area is one of the largest public/private restoration projects with 3,700-acres of land in the Yolo Bypass floodway restored to wetlands and other associated habitats and more restoration in the works. Visit or call the CA Dept. of Fish and Game Yolo Wildlife Area Headquarters for more information: 45211 CR 32B (Chiles Rd.), 757-2461.
- 16. Yolo County Grasslands Regional Park/City of Davis Burrowing Owl Preserve** Located off of Mace Blvd, approximately 1/2 mile south of the South Fork Preserve (#9), the Grasslands Park is a 320-acre park that contains natural resources and habitat for native wildlife species including the City's 33-acre burrowing owl preserve. The park also serves a variety of existing active recreation uses. For more information call Yolo County Parks & Natural Resources Division at 666-8775 or visit www.yolocounty.org.
- 17. The Herb Wildlife Garden** 273 Cousteau Place. The longest public herb garden in the world! The Herb Garden begins behind 2990 Fifth St., runs south of Arroyo Ave., and ends at John Barovetto Park. For more information on the garden, call the Parks & General Services Department (757-5656).



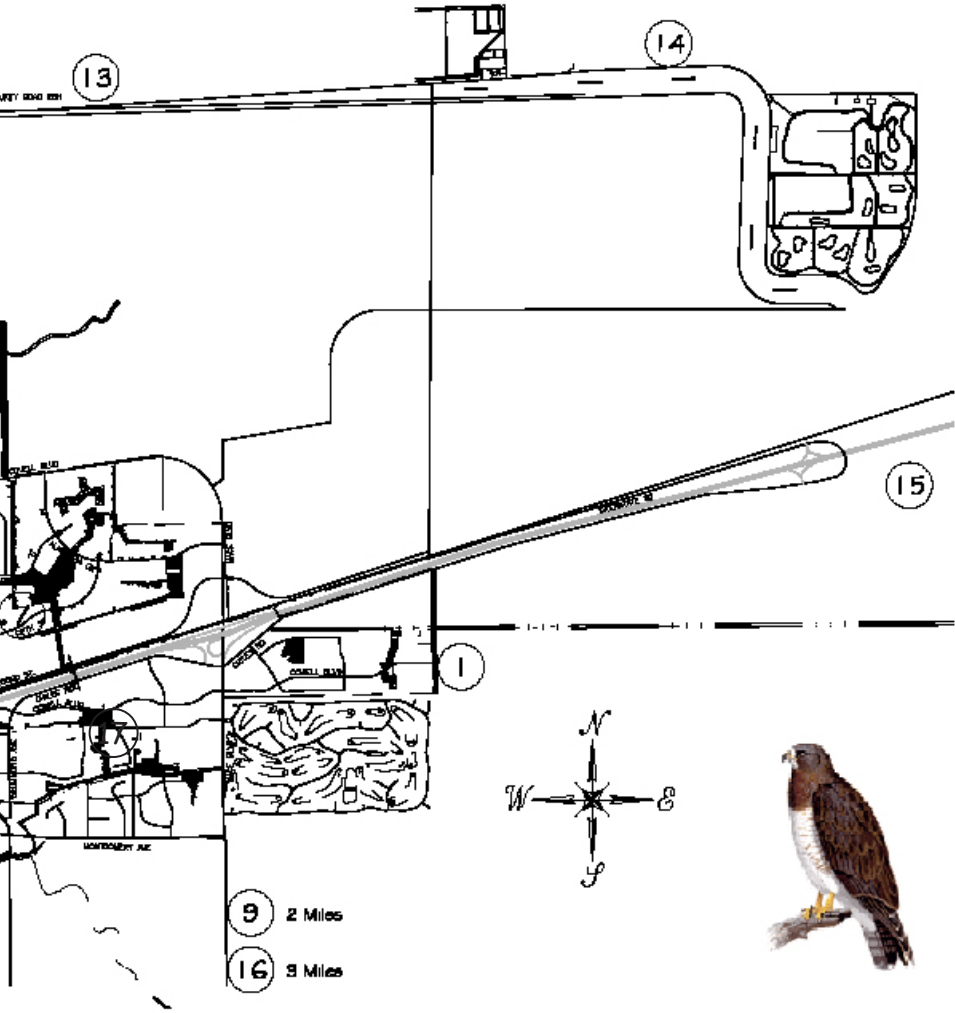
ENVIRONMENTAL TOUR

An Environmental Tour of Davis

In addition to the points of interest listed in the tour, there are many other environmentally related projects located throughout the City. Davis is home to over 20 local parks, 50 miles of on-street bike lanes and 52 miles of off street bikeways.



ENVIRONMENTAL TOUR



ENVIRONMENTAL TOUR

WATER CONSERVATION

Water conservation is the most cost-effective and environmentally sound way to reduce our demand for water. Using water carefully is important at any time. Here are some basic guidelines to help you practice efficient water use. For most single family residential customers, focusing on outdoor water use can result in easy water savings.



Leak detection

- ◆ Leaks can be the biggest water waster of all. If you feel your water use is high, you can request assistance from the Public Works Department free of charge by calling 757-5686. Public Works staff can determine if there is a leak on your property.
- ◆ Check for toilet tank leaks by adding food coloring to the tank. If the toilet is leaking, color will appear in the toilet bowl within 30 minutes (flush as soon as the test is done, since food coloring may stain the tank). Check the toilet for worn out, corroded or bent parts. Most replacement parts are inexpensive, readily available, and easily installed.

Water use in your home

- ◆ Make sure your home appliances are water efficient.
- ◆ Run only full loads in the washing machine.
- ◆ While you wait for hot water to come down the pipes, catch that water in a container to use on your outside plants or to flush your toilet.

In the bathroom:

- ◆ Install a toilet dam or displacement device (bag or bottle filled with water) to cut down on the amount of water needed for each flush.
- ◆ Turn off the water while brushing your teeth. This can save three gallons of water each day.
- ◆ Turn off the water while shaving.
- ◆ Shorten your showers. Even a one or two minute reduction can save up to 700 gallons per month.
- ◆ Don't use your toilet as an ashtray or wastebasket.
- ◆ When replacement is necessary, install water-saving shower heads and sink faucets or flow restrictors.
- ◆ When toilet replacement is necessary, replace with water efficient 1.6 gallon or less per flush models.



In the kitchen:

- ◆ If you wash dishes by hand—and that's the best way—don't leave the water running for rinsing. If you have two sinks, fill one with rinse water. If you only have one sink, use a spray device or short blasts instead of letting the water run. Also, try to use the least amount of detergent possible. This minimizes the rinse water needed.
- ◆ Keep a bottle of tap water in the refrigerator instead of running tap water to cool it for drinking.
- ◆ Don't defrost frozen foods with running water; place frozen items in the refrigerator overnight or defrost them in the microwave.
- ◆ Don't let the faucet run while you clean vegetables. Rinse them in a sink or pan.



WATER CONSERVATION

- ◆ Kitchen sink disposals require lots of water to operate properly. Start a compost pile as an alternate method of disposing of food waste.
- ◆ Operate dishwashers only when full.
- ◆ Hand scrape dishes before loading into dishwasher.
- ◆ Soak dirty pots and pans instead of cleaning with running water.

Lawns & Gardens: Water 3 times a week

Did you know that about 70% of the water used during the summer months is for landscape irrigation? Much of that water is being wasted because most landscapes (yes, even your lawn!) do not need to be watered every day. Landscapes can be watered only 3 days a week, without increasing the duration of watering, and still maintain that attractive look. Saving water is not only good for your pocketbook, but will also help reduce your carbon footprint.

In order to reduce demand on the water system during peak hours in the summer and to improve water conservation city-wide, water three times a week!



If your address ends in an odd number (1, 3, 5, 7 or 9), please try to water your landscape only on Tuesdays, Thursdays and Saturdays.

If your address ends in an even number (2, 4, 6, 8, or 0), please try to water your landscape only on Wednesdays, Fridays and Sundays.

Whether you set timers for your irrigation or you water by hand with a hose, if you keep your watering to the three days assigned, we will save water and reduce the strain on our City water system.

Just because you're reducing your watering to 3 days a week does not mean that you need to water your landscape for longer periods of time. Lawns, which are probably the thirstiest landscapes out there, only require about 1 ½ inches of water a week. By watering 15 minutes a day for 5 days a week, your lawn may be receiving anywhere from 2" to 15" of water!

Watering your lawn

Most people give their lawns too much water. Not only is that wasteful, but it can also damage your lawn and leave it more susceptible to pests and disease.

There is a simple way to make sure your lawn is getting the correct amount of water. Place 5 or 6 flat-bottomed containers (such as coffee mugs, tin cans, cake pans, etc.) on your lawn. Distribute them as evenly over your lawn as possible, keeping them at least 2 feet from the sprinkler heads. Turn on the sprinkler system so that the containers begin filling with water. After 15 minutes, turn off the system. Use a ruler or tape measurer to determine the depth of water in each container. The measurements will probably be between 1/8 to 7/8 of an inch. Using the average depth of water in the containers, you can use the chart on the next page as a guideline to determine approximately how many minutes you need to water your lawn each day for your three-day-a-week watering schedule.



WATER CONSERVATION

Irrigation Timers

You only need to worry about your irrigation timer three times a year.

1. In the spring—turn your timer back on to water 3 days a week when the weather warms up and the soil starts to dry out. Your lawn may need approx. 0.7 inches of water per week.
2. In the summer—once it starts getting really warm outside, you can turn up your watering. Your lawn may need approx. 1.3 inches of water per week. Set your timers to stay on a minute or two longer, or better yet, set them to turn on twice on watering day with a 30 minute break in between. This break in watering allows the water to soak into the soil and minimizes the water run-off on the sidewalk.
3. Early fall—as the weather cools down, you can adjust your timers to water less. Your lawn may only need about 0.8 inches of water in the fall.
4. Late fall—When it starts raining, turn your timer off. You don't need to water your landscape when it's raining!

Ave. depth in cans (in inches after 15 min.)	Spring (March-April)	Summer (May-Aug.)	Fall (Sept.-Oct.)	Winter (little or no watering required)
1"	4	7	5	
3/4"	5	9	6	
5/8"	6	11	7	
1/2"	8	14	9	
3/8"	11	18	12	
1/4"	16	28	18	
1/8"	32	56	36	

More landscape watering tips

- ◆ Water lawns during the early morning hours when temperatures and wind speed are the lowest, this reduces losses from evaporation.
- ◆ Cut down watering on cool and overcast days and don't water in the rain.
- ◆ Don't allow sprinklers to water your street, driveway, or sidewalk. Position them so water lands on the lawn and shrubs, not the paved areas.
- ◆ Avoid water runoff, especially on sloped lawns, by turning off the sprinklers for 15 minutes halfway through your watering time to allow the soil to absorb the water.
- ◆ Test irrigation sprinklers four times a year to ensure proper operation and coverage.
- ◆ Replace or repair broken or defective sprinkler heads/nozzles, lines and valves.
- ◆ Avoid over fertilizing your lawn. Fertilizer applications increase the need for water.
- ◆ Set your mower blades so they cut grass about 2 to 3 inches tall. Mowing it shorter dries out the soil faster and increases water use.
- ◆ Mulch plants to reduce evaporation and weed growth.
- ◆ Whenever possible, place plants with similar water needs close together.
- ◆ Modify your existing irrigation system to include drip irrigation, where feasible.
- ◆ Catch rain water from your roof in barrels for use in watering your landscaping.
- ◆ Xeriscape—replace your lawn and high-water-using trees and plants with less thirsty ones. See the UC Davis Arboretum website www.arboretum.ucdavis.edu/gardening.aspx Only replant in wet years; even drought resistant plantings take extra water to get them going.

Other outdoor activities

- ◆ When taking your car to a car wash—a good idea for saving water—be sure it's one of the many that recycles its wash water.
- ◆ Drive your car onto a lawn to wash it. Rinse water can help water the grass.
- ◆ Don't run the hose while washing your car. Use a bucket of water and a quick hose rinse at the end. Use an auto-shutoff spray nozzle on your garden hose.
- ◆ Use a broom instead of a hose to clean driveways and sidewalks.
- ◆ If you have a pool, use a pool cover to cut down on evaporation. It will also keep your pool cleaner and reduce the need to add chemicals.

XERISCAPING

While xeriscape translates to mean “dry scene,” in practice it means landscaping with slow-growing, drought tolerant plants to conserve water and reduce yard trimmings.

California’s limited supply of water, subject to ever increasing demands, is just one resource saved by xeriscaping. Xeriscaping can reduce the amount of plant trimmings which must be collected and composted, thereby helping your community, and ultimately you, to save resources. Fewer plant trimmings can reduce the amount of labor needed to maintain your landscape.



Xeriscapes generally require less fertilizer and fewer pest control measures than traditional landscapes. Since pesticides and fertilizers can inadvertently harm beneficial organisms, as well as impact air and water quality, reducing their use is a good idea. Using less of these materials also saves money.

Landscape Design and Plant Selection

A landscape can be designed from the beginning to reduce the amount of resources needed to maintain it and the amount of waste it produces. First, consider why you want a landscape. Why install plants and a lawn instead of decking or pavement? What is it to be used for? Whatever the intended use, proper design and plant selection can reduce the amount of waste a landscape generates through maintenance.

Today’s waste-efficient landscapes use “unthirsty” plants—California natives and drought tolerant exotics. Proper soil preparation, garden layout, and planting time assures that plants can mature into beautiful specimens with minimal trimming.

Soil Preparation and Irrigation Systems

Healthy soils grow healthy plants. A well drained soil (one that can absorb a 1/2 inch of water or more per hour), creates a good environment for plants to set deep roots and take advantage of deep water and nutrients. This makes for healthy, steady growth with reduced fertilization and irrigation needs.

Adding proper soil amendments can either help a soil drain faster or slower. Compost is an ideal amendment that can serve both these purposes and provide slow release nutrients for plants. The balanced growth encouraged by these conditions can reduce pruning maintenance as well as disease and pest pressures.

Water efficient irrigation systems are also waste efficient. By providing water in moderation, and only where a landscape requires moisture, excessive plant and weed growth can be avoided. Drip systems and micro-emitters allow precise delivery of water with very little waste and are very cost effective when evaluated against water restrictions and rising water costs.

Xeriscaping

- Conserves water.
- Provides lots of attractive planting options.
- Presents minimal pest and disease problems.
- Thrives with little fertilization.
- Requires low pruning and maintenance.

All of this adds up to time and money savings for you.

