

# Regional in Nature

# Activity Guide

JULY – AUGUST 2020

East Bay   
Regional Park District  
*Healthy Parks Healthy People*



Check Our Website for Information  
on Reopenings - Camping, Boating,  
Swimming, and Fishing.

Preparing for Fire Season.  
See page 4.



Social Distancing...  
The New Normal. See page 2.

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East Bay  
Regional Park District

Healthy Parks Healthy People

ebparks.org

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# Parks are Essential... NOW MORE THAN EVER

A MESSAGE FROM  
GENERAL MANAGER  
ROBERT E. DOYLE



The East Bay Regional Park District has long promoted parks as an essential service vital to our quality of life and to our physical and mental health. The recent COVID-19 crisis has demonstrated that, with undeniable clarity.

It has not been easy, with many challenges including limited staffing, rapidly changing health orders, and the need to educate the public quickly about how to visit parks safely (some of you may have seen our PSAs on TV providing information about visiting parks). Protecting the health and safety of the public and our employees continues to be our top priority.

The Park District has answered the call and kept over 99% of the District's 125,000 acres of parklands, 55 miles of shoreline, and 1,300

miles of recreational trails open and accessible to the public.

Through proper emergency management and planning, we have been able to limit crowding, keeping parks safe for visitors. Our plan ensures that parks and trails are kept open in the most equitable way possible, spreading out parks access in both urban and suburban areas.

I am also proud of our organization and how we came together during this crisis to persevere and carry out our mission of providing parks, open space, trails, recreation, and environmental education. Please enjoy the Digital Learning videos created by our talented Naturalists.

Thank you to our park visitors, too, for being responsible and doing your part, maintaining social distancing, bringing and wearing masks, abiding by rules

to keep dogs on-leash in parks, and avoiding gatherings, picnicking, and barbecuing. With continued increases in COVID-19 cases, it is important to keep yourselves and our staff safe by wearing a mask. Wearing a mask is essential to keeping us all safe.

I am proud of our staff for their resilience in adapting quickly to a changing environment and for their unwavering dedication to public service. Next time you see one of our employees, please thank them for their service. It means a lot.

Your patience, cooperation, and understanding during this time of crowded parks has been much appreciated by the Park District as we work to balance the public's need for parks, public health, and the health of our employees.

Stay healthy, and be safe in your Regional Parks.



## Social Distancing the New Normal in Parks



It's evident that COVID-19 has changed – at least in the short term – the way we collectively recreate, exercise, spend time with family, and explore the natural world.

Just a few months ago, being a thoughtful park visitor meant parking properly, bringing water, and picking up after our pets.

Today, it includes all the above plus bringing a mask, hand sanitizer, and being ready to step aside on narrow trails and at busy trailheads. For runners and bikers, it also means keeping an even greater distance as strenuous exercise can cause more forceful expulsion of airborne particles.

Parks have become essential during the pandemic as the public increasingly depends on parks to maintain physical

and mental health. No longer are parks just nice-to-have, they are a must-have. Parks provide access to nature – a sanctuary from which we draw strength and solace. Eco-spirituality, the connection between humans and the environment, sustains us through challenging times.

To keep parks safe and enjoyable for all – from hikers to runners, bikers to bird watchers, and anglers to horseback riders – everyone needs to do their part.

Protect yourself and other park visitors from COVID-19 exposure. Join us in keeping our parks safe and accessible by always wearing a mask at or around your neck and covering your nose and mouth when you are near other people.

For more info on COVID-19 park guidelines, visit [ebparks.org/COVID-19](http://ebparks.org/COVID-19).

# Forging Forward in Midst of COVID-19

## Projects improving Public Access, Habitat Restoration, and Wildfire Protection

During the past six months, we have worked steadfastly, adapting quickly to new challenges and demands. Keeping our eyes on the prize, we have completed several major shoreline projects that protect our natural environment and provide recreational access with spectacular views. Take a look at several public access improvements, habitat restoration projects, and safety initiatives below:

### **Albany Beach and SF Bay Trail Extension—NOW OPEN**

This long-awaited one-mile extension of the SF Bay Trail from Gilman Street and to Albany Beach recently reopened – removing one of the largest gaps in the Bay Trail and creating 18 miles of continuous Bay Trail from Richmond to Oakland. The new trail, comprising a magnificent bridge, provides panoramic views of the Golden Gate Bridge, Bay Bridge, and San Francisco skyline. The project also restored beach habitat and improved public access at Albany Beach, including additional parking, restrooms, and picnic tables. This location is a launch site for the SF Bay Water Trail.



### **Bay Point Regional Shoreline: Trail Improvements and Habitat Restoration – OPENING SOON**

Bay Point Regional Shoreline will soon reopen after being closed for the last 18 months to build new trails and enhance habitat for native species that can withstand projected sea level rise. New picnic areas, restrooms, a drinking fountain, and a kayak launch site were also added to this shoreline park located off of Highway 4 at Bailey Road. This location is a launch site for the SF Bay Water Trail.

### **Judge John Sutter Regional Shoreline Bay Observation Pier—OPENING SOON**

A 600-foot long bay observation pier was recently completed at the new Judge John Sutter Regional Shoreline, located at the eastern touchdown of the Bay Bridge. The observation pier, built atop six pilings from the old Bay Bridge, provides spectacular Bay views and allows visitors to connect to the site's transportation history. Fishing is allowed.

### **Black Diamond Coal Mining Exhibit—OPENING SOON**

A new realistic coal mine exhibit at Black Diamond Mines Regional Preserve has been completed that will take visitors back in time to an 1870s era coal mine, complete with sights and sounds. The immersive educational experience will allow for greater understanding and appreciation of the area's coal mining past.

### **Dumbarton Quarry Campground by the Bay at Coyote Hills—COMING 2021**

Construction is on-going to build the Park District's first shoreline campground with a grand opening expected in 2021. The first phase of the project includes 63-site RV campsites, shower and washroom buildings, camp store and scenic walking trails along the Fremont/Newark Shoreline.

### **McCosker Creek Restoration and Public Access Project—UNDER CONSTRUCTION**

The largest creek restoration project in the Park District's history recently broke ground at Sibley Volcanic Regional Preserve. The project will restore sections of Alder and Leatherwood creeks in the upper San Leandro Creek watershed, daylighting 3,000 feet of creek and re-establishing habitat for 10 special-status species. The project will also add parking, restrooms, water fountains, trails, and a group campsite. The project is expected to be complete in 2023.

### **Wildfire Protection**

The Park District is staying ready for wildfires through fire hazard reduction, weather monitoring, special wildland firefighting equipment, and continued training – all essential activities that continued throughout the COVID-19 crisis. Recent highlights include three FEMA and CalFire fuels reduction projects, an eight-person fuels reduction crew, virtual and in-person firefighter training, and goat grazing.

## COVID-19 and Wildlife

**W**ildlife doesn't know that there's a pandemic going on. California least terns are continuing to migrate from South America, building their nests, laying eggs, and hatching babies just like they have always done along the east side of the San Francisco Bay. In rock-strewn grasslands, the Western Fence Lizard is basking in the sun and not fussing about keeping its social distance, but instead is flashing its stunning blue sides to invite others of its kind to join in a reptilian-style rock party! Lastly, in the fading light and the cool evening air, nearly 15 East Bay Bat species are "un-masked" and flitting about, eating anything that bugs them.

Covid-19 has allowed us to slow down and reconnect with the immediate natural world around us. Every time you venture out into nature, you can discover something spectacular. We have some pretty amazing animal and bird species right here in our East Bay Regional Parks.

While many think there are suddenly more birds singing and wildlife sightings, in reality, it could be that with less anthropogenic (human) noise, less rush hour traffic, we are hearing more birds, and with more people in the parks, seeing more wildlife. Increased number of people in parks may also attract animals – such as coyotes – who may be searching for dropped sandwiches, etc.

One note of caution. Please respect wildlife and give them space. It is crowded out there right now. Also, please never feed any animals.

We are all creatures, and we are all in this together.





# Wildfire Protection

EAST BAY REGIONAL PARK DISTRICT

## Preparing for 2020 Fire Season

**L**ong-range forecasts are predicting that this year will be especially dry, so East Bay Regional Park District's fire department is gearing up for a potentially dangerous fire season.

Fire Chief Aileen Theile cites two factors in particular. Weather forecasters are predicting more frequent, dry offshore breezes. And although this was a relatively dry winter, late spring rains stimulated more growth by already tall grasses.

Firefighters used to think in terms of a "fire season." However, with climate change, the fire season is now virtually year round. And so is the work of the fire department.

To combat fires, Chief Theile leads 16 fulltime firefighters and some 34 on-call staff – Park District employees with other primary job duties, but who are also fully trained firefighters available when needed.

A new and important component of the fire department is an eight-member fuel reduction crew. This crew works throughout the year to enhance fire safety by clearing brush away from trails, trimming trees to remove ladder fuels, and piling the resulting vegetation for disposal by burning "strategically and where appropriate," as Chief Theile said. They fight wildfires too, when needed.

Fire headquarters are at Station 1 in Tilden Regional Park near Berkeley. Seven other stations throughout the Park District are staffed as circumstances demand. All have engines and other equipment in place.

A dispatch center operates 24 hours per day in support of the District's firefighters and police. During a fire, the Park District's two police helicopters serve as observation platforms to determine fire location and speed, and best access for ground crews. The helicopters are equipped with Bambi Buckets to fight fire from above with 250-gallon water drops.

Of course, the coronavirus pandemic has dominated the news in recent times. In that regard, Chief Theile noted that it was easier for the firefighters to observe the new protocols, because they are accustomed to wearing protective gear anyway.

Their additional safety measures include assigning specific, separate crews to each engine, allowing only assigned personnel in the stations, and designating one firefighter to approach and assess a victim in an emergency situation, before committing the entire crew. Post-incident decontamination is accomplished as appropriate.

There are major ways in which the public can help the Park District reduce fire hazards. It should be noted that smoking, including vaping,

is not permitted in the regional parks. And during any emergency, park visitors need to cooperate with all instructions from firefighters, police, or park rangers.

If you see a fire while in a park, call 911, try to report the fire's location, size, direction of burn, and any structures threatened, then leave immediately.

Beyond that, Theile said, "We ask people to take a hard look at fire safety in their own backyards."

"It's not just one neighbor doing it, but the entire neighborhood," she added.

"Thirty feet of lean, clean and green" is the motto. This means reducing the fuel load by mowing. From 30 to 100 feet out should be a second zone of thinned vegetation. Detailed information on defensible space is available at the CAL FIRE website, [fire.ca.gov](http://fire.ca.gov).

It's also important to have an evacuation plan in case of an approaching fire. "Don't wait to be told," Theile said, "and don't block the road so that fire engines can't get in."

To sum it up, "Be informed and be prepared," Chief Theile said.



*Regional Park District firefighters mopping up a wildland fire.*

# Wildfire Protection

## EAST BAY REGIONAL PARK DISTRICT



### Oakland Hills Fire – More Prepared Today

The Park District's most challenging event was likely the Oakland Hills firestorm of 1991.



It began on Saturday, Oct. 19, with a small fire on private property in the Oakland hills. The cause has never been conclusively determined.

Oakland firefighters extinguished the blaze with mutual aid from Park District crews and the state.

However, smoldering embers reignited the next morning. Fanned by strong easterly winds, the fire soon became an inferno.

Responding to mutual aid calls from the Oakland Fire Department, virtually every available firefighter and public safety officer in the Park District, as well as many other Park District staff and volunteers, helped to fight the fire or assist evacuees. Other firefighters responded from all over California.

Some 60 Park District firefighters and 48 police officers were involved at one time or another. Among the District firefighters were two current Park District board members, Dee Rosario and Dennis Waespi.

Working in concert with other fire departments and citizen volunteers, District crews were able to save dozens of homes from destruction.

By the time the fire burned out, it had consumed 2.5 square miles of mostly residential neighborhoods. Twenty-five people were killed and 150 injured. The

fire destroyed 3,469 homes and apartment units and 2,000 automobiles. Ten thousand people were evacuated. The fire burned portions of two regional parklands: Claremont Canyon and Lake Temescal.

The National Oceanic and Atmospheric Administration (NOAA) estimated the fire cost at \$3.9 billion in damages.

The blaze did provide a strong impetus for establishment of the Hills Emergency Forum (see *Inter-Agency Cooperation* story to the right), and for extensive improvements in already existing mutual aid agreements.

In the years since the Oakland Hills Fire, all the Park District's firefighting equipment has been upgraded.

The District currently is well prepared for emergencies, in terms of both equipment and personnel. It has four Type 3 engines that can each carry 500 gallons of water and four firefighters, seven Type 6 engines with 300 gallons and two firefighters, two water tenders with 1,800 gallons each, two off-road ATV-style rescue vehicles for back country medical emergencies, one horse rescue trailer, and a Type 1 engine designed for structure fires and heavy rescue. And the District's two helicopters are equipped with Bambi Buckets that can drop between 144 and 250 gallons of water on fires.

All the District's firefighters, both fulltime and on-call, have received state-approved training and certification. An ongoing training program keeps them current and up-to-date.



### Inter-Agency Cooperation

Besides its own personnel and equipment, the Regional Park District has mutual aid agreements with CAL FIRE, the California Office of Emergency Services, and every fire department within Alameda and Contra Costa counties. This enables rapid response to emergencies both within and outside the parklands.

And the Park District is a founding member of the Hills Emergency Forum (HEF), which was established after the 1991 Oakland Hills fire. This is a consortium of fire departments and public agencies working together to prepare for and respond to fires in the East Bay Hills. One of its important accomplishments was increased standardization of equipment and radio frequencies among the various agencies.

Another feature of fire preparedness in the hills is the District's fuel break, a zone of thinned vegetation between regional parklands and adjoining residential neighborhoods, which extends from Richmond south to Castro Valley.

It serves two purposes: slowing the spread of fire in either direction between open space and adjacent neighborhoods, and providing firefighters with a place to make a stand.

The District's fuel reduction crew works on keeping the fuel break in order. And the District contracts with a company that grazes goats selectively to reduce the vegetation within the break. One advantage of goats is that they are undeterred by poison oak, and in fact will eat it.

Another District program with fire suppression benefits is cattle grazing, which helps keep grasses and other potential fuel at a manageable level. The District operates grazing leases with a number of East Bay ranchers. Their operations are closely monitored by park supervisors and a District grazing manager.

As part of fire weather prediction efforts, a network of ten Remote Automated Weather Stations (RAWS) is in place in Alameda and Contra Costa counties. The Park District monitors four of them that are within regional parks: at Del Valle near Livermore, Black Diamond Mines in Antioch, Briones Regional Park near Martinez, and Las Trampas in San Ramon.

These automated stations provide information on temperature, wind speed and direction, and vegetation moisture level, all to help firefighters determine when red flag conditions exist.



# Ardenwood HISTORIC FARM

## The Buzz on Native Bees



**A**long with honeybees, native bees pollinate more than 30 percent of the foods we eat, helping plants produce their fruits and seeds. But while it takes 20,000 honeybees to pollinate an acre of apples, it only takes 250 native mason bees to do the same. Native bees are not only more efficient than honeybees; they also work longer days and longer seasons.

With about 1,600 species of bees in California alone, native bees come in a variety of shapes and sizes. In general, they are attracted to blue, purple, yellow, and white flowers with an open-cup shape and aromatic fragrance, but just as bee species are diverse, so are the flowers they will visit. If you have a yard, balcony, or window box, an internet search

for bee-friendly California native plants can give you ideas for plants to support native bees in your space.



Another way to help native bees at your home is to make a bee box for them (pictured above.) A bee box is

a block of wood with different sized holes for them to nest in – almost like a tiny apartment building for these hard-working arthropods. You can find easy, fun ideas and instructions by doing a basic online search.

In case you are worried about bringing bees to your yard, let's squash their bad reputation. Bees are not going to chase you down and sting you. They are not aggressive and only sting to protect themselves or their homes. In fact, most native bees have stingers that can't pierce human skin, and male bees don't have stingers at all.

So help us give them – and us – a leg-up (or six!) by creating bee habitats throughout our community to keep them buzzing!

## Jump Rope Rhymes

Jumping or skipping rope was a popular pastime for Victorian children and has remained a schoolyard favorite for generations.

A 3-person jump rope can be fashioned from a 12-foot length of heavy, soft rope. Braided cotton or nylon is a good choice.

Start with a slow back and forth before working up to all the way over. Skipping in time to these classic rhymes makes for even more fun.

This is probably the best-known jump rope rhyme of all time:

Cinderella, dressed in yellow  
Went upstairs to kiss her fellow  
Made a mistake  
And kissed a snake  
How many doctors  
Did it take?  
1, 2, 3, 4, 5...

While jumping to this rhyme, jumpers must mime the actions mentioned:

Teddy Bear, Teddy Bear, Turn around.  
Teddy Bear, Teddy Bear, Touch the ground.  
Teddy Bear, Teddy Bear, Touch your shoe.  
Teddy Bear, Teddy Bear, That will do.  
Teddy Bear, Teddy Bear, Go upstairs.  
Teddy Bear, Teddy Bear, Say your prayers.  
Teddy Bear, Teddy Bear, Turn out the light.  
Teddy Bear, Teddy Bear, Say good night!

## Farmyard Funnies

**Q:** If one sheep is called an ewe, what are two sheep called?

**A:** W

**Q:** What do sheep do on a sunny day?

**A:** Have a baa-becue!

**Q:** How do the hogs write letters?

**A:** With pig pens.

## Ice Cream!

It's science, it's history, it's fun! It's making your own ice cream! And you don't even need an ice cream maker! All you need are ingredients, reusable silicone or zip-top bags, and a little of your own energy.

When the hand-cranked ice-cream freezer was invented and patented in 1845 by New Jersey housewife, Nancy Johnson, ice cream became a treat that many American households could enjoy. Here's our own recipe from the farm:

### Ardenwood Vanilla Ice Cream

- 1 quart half and half
- ¾ cup sugar
- 2 teaspoons vanilla
- 4 cups crushed ice
- 4 tablespoons coarse salt

You may be wondering about the salt. No, it's not in the ice cream mix itself, but with the ice on the outside. Salt causes the ice to melt at a lower temperature which allows the ice cream to start freezing.

Mix the first three ingredients in a bowl and stir until the sugar is dissolved. Then pour as much of the mixture as you can fit into a quart-size zip top plastic bag, and seal it. (You'll have a little mixture left over.) Put that bag in another quart-size zip top bag, seal it, and put it all in a gallon-size zip top bag with 4 cups of crushed ice and 4 tablespoons of coarse salt.

Squeeze out as much air from the bag as you can and seal it tight. Wrap the bag in a towel or put on oven mitts (it'll be c-c-c-cold!) and shake the bag vigorously for 5-8 minutes or until the ice cream is frozen. Try to make sure the ice-salt mixture is always surrounding the bag of ice cream.

If you do have an ice cream maker at home, you can double the recipe for more homemade frozen goodness and just follow the manufacturer's directions!

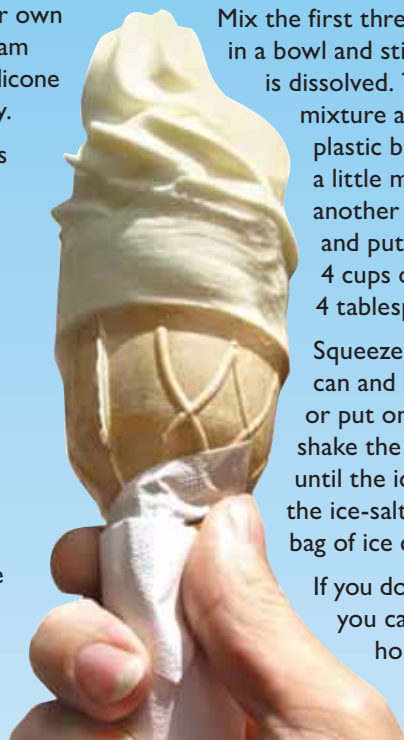


Photo: Petr Kovar

# Big Break

## REGIONAL SHORELINE



### What's in a Name?

Ever wonder why this place is called “Big Break”? There was a “big break” in the levee that held back the San Joaquin River from fertile asparagus fields. Although we knew why it's called Big Break, we searched for years trying to find out when the break broke! We found second, third, and more-hand references to 1927 and 1928.

Local Historian Carol Jensen challenged herself to find the date and circumstances surrounding the event that changed the Delta, Oakley, and later the East Bay Regional Park District. She was recently joined by Big Break Docent Steve Imialek in her efforts. After some serious sleuthing, they found the following excerpt in the County News section of the June 5, 1928 edition of the Pittsburg Post-Dispatch.

*“June 2 – Several thousand acres of river bottom land, extending from the Antioch Bridge easterly along the San Joaquin River and Dutch Slough to Iron House Slough where Marsh Creek joins the main river, are inundated and all crops are probably ruined as result of a break in the river levees on the property of Mrs. Wright, formerly the California Packing Corporation ranch.*

*Among the properties under water are the lowlands of Diethelm and W.T. Sesnon maintained buildings. The flood waters range from four to ten feet in depth and extend south from the river a distance of more than a mile in some points. Several families of ranchers are marooned by the flood and property loss will be heavy.”*

Thankfully no one was reported hurt. The “Big Break” was never repaired. Though it seemed the details surrounding the event might be lost under the flood waters, Carol and Steve answered the challenge and brought the story to the surface!

These mysteries and histories, and the people who bring them to light, enrich our appreciation and wonder for our parks. Each park is full of stories, especially the ones you make when you visit!



### Well-Seasoned Delta Perspective

A scene in the wonderful Pixar movie Ratatouille perfectly captures the spirit of Big Break Regional Shoreline's Delta Discovery Experience (DDX).

The visibly nervous waiter asks the grumbly restaurant critic Anton Ego for his order. Ego responds, "...you know what I'm craving? A little PERSPECTIVE. That's it! I'd like some fresh, clear, well-seasoned perspective!"

The DDX offers a heaping helping of perspective. Perspective on the sometimes perplexing, always fascinating, California Delta.

This 1,100 square-mile chunk of California gathers the flows of the Sacramento and San Joaquin Rivers in a maze of waterways, islands, levees, towns, wildlife and more. It's the hub of California's water distribution system, quenching the thirst of nearly 30 million Californians, irrigating millions of acres of farmland, and supporting businesses and communities throughout the state.

And the Delta is flat. Without hillside views it's tough to get “a little perspective.” Throw in the fact that many Californians can't even find the Delta on a map and it's easy to overlook the profound impact this beautiful region has on our everyday lives.



*The DDX features the 1,200 square-foot Delta map, fishing and observation pier, beach kayak launch, amphitheater, lawns, sandy play area, interpretive panels, and lovely Delta vistas.*

Fret not! The DDX is anchored by a spectacular 1,200 square-foot scale map of the Delta. The newly labeled walkways depict the rivers flowing into the Delta and the Carquinez Strait connecting the Delta to the Bay. (Bonus! Pour water on the map's blue waterways and watch it flow, just like in the “real” Delta, steps away.)

The map's alignment is accurate, too. Stand atop the map's Mt. Diablo (an easy climb!) and look to the map's Sacramento. Now lift your eyes. You're looking toward the real Sacramento! Although you can't see “real” towns in the flat distance, on a clear day you can glimpse the Sierra Nevada Mountains, where much of the water coursing through the Delta begins as snow (try it at dawn when the rising sun backlights the Sierras!).

The walkways, map, and view provide the “Aha!” moment. “This is how the Delta comes together and connects our state.”

A well-seasoned perspective, indeed!



# Black Diamond Mines

REGIONAL PRESERVE

## Walking into the Past

A self-guided stroll through the coalfield

**A** bustling town once filled the valley at the end of Somersville Road in Black Diamond Mines Regional Preserve. Today, it is hard to imagine that this quiet, scenic area was part of California's largest coal-mining area, the Mount Diablo Coalfield. From 1860 to the early 1900s, twelve coal mines here supported five towns: Somersville, Nortonville, Stewartville, Judsonville, and West Hartley.



On this stroll, you will explore a portion of the Somersville History Hike. Check the trailhead's map for hike medallion locations.

### I. Independent Mine

The large depression here is a shaft from one of the earlier and shorter-lived coal mines, the Independent. The mine's 710-foot deep vertical shaft has been filled with rocks and soil. A steam engine powered lifts (elevators) in the shaft which moved men and



supplies into and out of the mine, and powered pumps which removed water from the workings.

On December 20, 1873, tragedy struck when the steam engine exploded, killing three men, and wounding several others.

### II. Pittsburg Railroad

Originally, coal from the Mount Diablo Coalfield was hauled by wagon to barges on the San Joaquin River and shipped to the San Francisco Bay Area, Sacramento, Stockton, and points between. As production grew, the Coalfield needed more efficient transportation. Three railroads were built to serve the Coalfield—the Black Diamond, Pittsburg, and Empire. In addition to coal, the railroads also carried passengers, supplies, and drinking water for the mining towns.



You are walking on part of a wooden trestle, or railroad bridge, on the Pittsburg Railroad which carried trains over the creek and ravine. It was buried to preserve the wood but some of its timbers are exposed below the trail. The iron tracks were scrapped during World War I and ranchers used the ties as fence posts.

### III. Waste Rock Pile

Appearing almost volcanic, this mound is made from shale, sandstone, and



petrified wood which were removed from the Pittsburg Mine and dumped here. The dull black and gray colors come from carbon, the same element that makes coal, but these rocks will not burn as well as the coal.

The rocks date from 50 to 55 million years ago when the area alternated between ocean bottom and forest or swamp. The ocean sediments became shale and sandstone while the coal and petrified wood came from massive amounts of vegetation that lived and died here.

Remember to leave the rocks for others to enjoy.

### IV. Eureka Slope

Peer down the incline and imagine working in the cramped, dark confines of a coal mine. What thoughts crossed the minds of miners here as they started their workday? They rode down this slope on railroad cars called skips to their assigned workings. At other mines, they rode lifts down shafts (vertical tunnels) or some walked into adits (horizontal tunnels).



The miners here sometimes worked 10-12-hour shifts, six days per week. It was not just men who toiled here—boys also worked in the mines. Many were knobbers, 8 to 12-year-olds who helped move coal through the workings and load it into the coal cars that would haul it to the surface.



### V. Somersville 1878

In the 1870s, Somersville was a booming settlement. About 900 people worked and lived here, supported by the mines or the many businesses associated with them. Social activities occupied their free time and their children benefited from a highly regarded school.

### VI. Sam Brown's Store

Buildings in all five towns are gone now due to relocation, vandalism, fires, and age. However, clues such as artifacts and non-native trees remain, illuminating their former locations. Sometimes changes to the ground surface show building sites. Hillside were flattened to create level surfaces for building. A few buildings had foundations, and some had cellars.

The depression here was the cellar of Sam Brown's store, one of the businesses which supported the miners and their families. The three-story building had a meeting hall, a general store, and a saloon. The building was dismantled and moved after the mines closed.



### The Park Today

While Black Diamond Mines Regional Preserve is named after the "black diamonds" mined from these hills during the days of Somersville, the preserve showcases a variety of historical time periods and natural wonders. This walk focused on the coal mining history of the preserve. To learn more about the natural world, and other aspects of the regions history, please contact Black Diamond Naturalists at [bdvisit@ebparks.org](mailto:bdvisit@ebparks.org).



# Coyote Hills

## REGIONAL PARK



## Reconnecting with Nature with the Nectar Garden

A unique feature of Coyote Hills Regional Park is the Nectar Garden where visitors can reconnect to the outdoors.

The Garden provides a haven for butterflies, bees, hummingbirds, and other wildlife. It provides everything these animals need: native plant habitat, water, places to hide, and an area to raise young. The Garden recreates natural wildlife habitat and is a place for the entire life cycle of a species to occur, from chick to fledgling, or from larva to imago (adult stage).

Nearly one hundred species of butterflies were once found in the bay area; today, there are fewer than twelve. Habitat loss, pesticide use, climate change and heavy grazing have all played a role in their decline. Biologists suggest people start urban gardens as restoration projects, creating wildlife corridors and providing opportunities for interaction with wildlife.



Monarch photo:  
Eric Nicholas



One frequent visitor to the Garden is the monarch butterfly. Each fall, western monarchs begin an incredible migration from Canada to parts of California in order to

overwinter. By February, they seek out

mates and locate milkweed to lay their eggs. At the Garden, visitors may see all the stages of monarch metamorphosis: egg, caterpillar, chrysalis, and butterfly. Blooming nectar plants provide the needed nourishment for the adult butterflies.

The Nectar Garden also hosts migrating birds that journey thousands of miles hunting for food sources and searching for places to raise their young. Photographers delight in searching out these elusive winged creatures in early morning. The pesticide-free Nectar Garden is normally open year-round from Wednesday to Sunday, 10 a.m. to 4 p.m. Please check before you visit for current conditions.

Today, wildlife diversity has been diminished. Through conservation and restoration of natural habitats, we can all contribute to bringing back the wide variety of birds and butterflies once found in the San Francisco Bay Area.

Photo: Jerry Ting

## Woodpeckers of Coyote Hills



**Northern Flicker**



**Nuttall's Woodpecker**



**Downy Woodpecker**

Bird photos: Eric SF

**W**oodpeckers grab our attention with their undulating flight pattern, bold black, white and red feather coloring, and loud drumming and calls. They also voraciously consume insects, many of whom are considered pests. Let's learn to appreciate these contributors to organic pest control!

One of the common woodpeckers at Coyote Hills is the *northern flicker*. Its field marks include mustache, a wide collar necklaces, polka-dotted belly, bright white rump patch, and gorgeous red (occasionally yellow) shafted wing and tail feathers. Flickers feed mostly on ants—using their long, barbed tongue—at the base of trees. In the winter, they feed on berries from poison oak, elderberry trees, and wild grapes, helping to spread the seeds, far and wide.

*Nuttall's woodpeckers* are also found in the park. This black, white, and red bird features a striking horizontal striping pattern on its back, with solid black patch at the base of the neck. The male has a red patch at the back of his head. The males and females form monogamous pairs and defend territory together usually only during breeding season. You can often find these small woodpeckers in the oak trees on the front lawn of the visitor center.

The *downy woodpecker* is one of the smallest woodpeckers. You can differentiate this bird from the Nuttall's because of its smaller size and its white back and white spots on the wings, and just a little patch of red on the back of the head on the males. Males and females have different foraging strategies, so they can easily share the same habitats, with males feeding on small branches and wood stems, and females sticking to larger branches and tree trunks.

See [ebparks.org/rin](http://ebparks.org/rin) for upcoming programs.



# Crab Cove

## VISITOR CENTER AND AQUARIUM

### Grunion on Robert Crown Memorial Beach



Photo: Jerry Ting

**In the dead of the night**, depending on the high tide and moon cycle, California Grunion, *Leuresthes tenuis*, emerges from the water and appears on sandy beaches to lay eggs. Males appear first, scouting the area at the edge of the tide line. Then the females arrive, coming ashore, digging tail first into the sand to lay 1600-3600 eggs. Soon they are surrounded by several males who contribute their milt (fish sperm). Then they all swim off with the next wave. The eggs remain buried in the sand, waiting for the next high tide to hatch out.

These unusual fish are found along the coast of California and Baja, not anywhere else in the world. Normally their range is Point Conception in Southern Santa Barbara County to Point Abreojos in northern Baja California. More recently they have been discovered as far north as Tomales Bay. In Southern California people go fishing for them using bare hands. No nets, poles, or even digging holes are allowed. They may not be harvested during the peak of their spawning cycle (April and May), and a California fishing license is required. The Grunion in the San Francisco Bay are much smaller than those in Southern California, but studies have proved they are the same species.

Very little is known about grunion. The first record to identify grunion in the San Francisco Bay dates back to 1860 from a fish market. In 2001, the Fish and Wildlife Department re-discovered several during a routine net survey. Then, in 2005, they found that endangered least tern birds were feeding grunion to their young. Volunteers called “Grunion Greeters” went out along Crown Beach and found the fish spawning in the sand at high tide. Then in 2007, for unknown reasons the fish disappeared, and volunteers ceased looking for them. Ten years later, Crab Cove Naturalist Susan Ramos decided to search for them once again. She led a group of 15 intrepid visitors for a walk at 1 a.m. Imagine the shock and delight experienced when hundreds of grunion showed up!



From that summer on we have offered grunion programs and reported the data collected to Pepperdine University. The fish are very skittish and easily disturbed by light. Crown Beach has an enforced park curfew of 10 p.m. which does not allow visitors at the hour the grunion typically show up here in the bay – much later than in Southern California.

Unfortunately, due to COVID-19 no grunion programs will be offered this year, but watch for programs in the future.

For additional information contact Susan Ramos at [sramos@ebparks.org](mailto:sramos@ebparks.org), Pepperdine university at [www.grunion.org](http://www.grunion.org) or California Fish and Game: [wildlife.ca.gov/Fishing/Ocean/Grunion#28352307-grunion-facts-and-faqs](http://wildlife.ca.gov/Fishing/Ocean/Grunion#28352307-grunion-facts-and-faqs).

### Peregrine Falcons at the Shoreline

The peregrine falcon (*falco peregrinus*) is the fastest animal in the world, diving through the air at speeds of up to 240 mph! People can easily get a speeding ticket for driving one-third as fast. Peregrines eat mostly birds caught in mid-air, and it's exciting to watch them as they hunt acrobatically.

Some peregrines have become famous for living in cities. Tall buildings and bridges are similar to rocky cliffs where they nest. One of the easiest places anywhere to watch peregrine falcons is around the Fruitvale Railroad Bridge, right next to the automobile bridge connecting Alameda and Oakland. Watch for them during nesting season, from February through June.

About the size of a crow, peregrines hunt over much of the East Bay, especially the shorelines. The Fruitvale Bridge falcons probably hunt all over Alameda including Crown Beach, and at Martin Luther King Regional Shoreline in Oakland. If you notice a flock of shorebirds or pigeons scattering away quickly, search for a predator like a peregrine on the chase. Look for their distinctive black “sideburns” that contrast sharply with the light feathers under their throat. Watch for them tucking their pointy wings back aerodynamically, allowing them to reach incredible speeds before they slam into their prey with sharp talons.

Fifty years ago, peregrine falcons were almost extinct. Along with other top predators like bald eagles and brown pelicans, peregrines were being poisoned by the insecticide DDT, which was heavily used in the 1940s through the 1960s: the shells of their eggs became too thin to protect the baby birds inside.

Most uses of DDT in the U.S. were banned in 1973. Biologists then began captive breeding programs, and young peregrine falcons were released into the wild for 25+ years. Now there are around 400 self-sustaining pairs in California! The recovery of peregrine falcons and other predatory birds is a huge conservation success, thanks in part to the outlawing of DDT, protection provided by the Endangered Species Act, and the dedicated work of biologists and activists.

If you want to watch peregrines close-up during nesting season, do an Internet search for *peregrine camera*, and you will find links to nests with video livestreams in the Bay Area and beyond. It is just as wonderful to watch peregrine falcons in person, so when you are outside, keep looking skyward for the fastest animal in the world!

There's nothing like summer at the lake. And there's nothing like fishing, hiking, camping, and swimming to make lifelong memories together. Dive in and learn more about Del Valle.

# Del Valle REGIONAL PARK



## What Fish is That?

Lake Del Valle is a dynamic habitat that is home to a number of different fish species. Here are pictures of some of the fish that call Lake Del Valle their home, do you know what kind of fish they are? (Answers below)



Answers: 1. Rainbow trout, 2. Bluegill, 3. Striped bass, 4. Largemouth bass, 5. Channel catfish

Fish illustrations © Duane Raver and DNC

## Did You Know...

The original "Some More" recipe was invented by the Girl Scouts of America and published in *Tramping and Trailing with the Girl Scouts*, 1927!



### "Some More"

#### Ingredients:

- 16 graham crackers
- bars of chocolate (broken in two)
- marshmallows

Toast two marshmallows over coals to a crisp gooey state and put them inside a graham cracker and chocolate bar sandwich. The heat of the marshmallow will melt the chocolate a bit and you will want "some more!"

## The Eagle has Landed!

Bald eagles were on the brink of extinction in the 1970s, today their population is thriving due to environmental regulations. Del Valle is home to a pair of nesting bald eagles that lay eggs each year. Let's take a look at what that journey looks like.



The pair will add new material to their already existing nest. A bald eagle nest can be 6 feet in diameter and 4 feet tall! When it's ready, one to three eggs are laid in February or March.



About 35 days later small, downy, light-grey chicks, also called eaglets, hatch. This year an eaglet was hatched on April 14.



As they grow, they turn dark brown and can gain about one-half pound of weight each week! At about eight weeks old they are growing so rapidly that their parents have to hunt nearly non-stop to feed them. The adult eagles are often seen hunting for fish in the lake.



Once their downy feathers are replaced with flight feathers, the eaglets are ready to go! They will begin fledging at 11-12 weeks old, usually around the Fourth of July. You'll see the mottled juveniles flying around the lake but they won't develop the iconic coloring of the adult until they are four or five years old.



# Mobile Education

## Nature Nearby Scavenger Hunt!

Explore your neighborhood, look out your window, discover a close by park and check around your house to find as many things as you can!

### Build a Wildlife Habitat in *YOUR* Habitat!

Every corner outside can be a habitat for wildlife! The ingredients of a good habitat are food and water, shelter, space, and friends. Follow these tips and tricks to create space for new neighbors big and small.



Photo: Art/M

1. Find a corner of your yard, porch, or patio. Then gather some rocks, sticks, and living plants that have leaves all year round. If you already have some plants growing in your yard, great! Otherwise, you can buy a plant at your local nursery or dig up some weeds in your neighborhood. (Be sure to dig up all the roots.)

2. Create shelter by stacking the rocks and sticks among the plants. Imagine being small. What would make you feel cozy and protected?
3. Bring water to your habitat. You can fill a small plastic cup, or cut the bottom out of a plastic bottle to make a shallow pool. Put a rock or a stick inside your pool so creatures can crawl out if they fall in.
4. **DO NOT** leave any food in your habitat. If you do, creatures might become dependent on it to survive. They might also go searching for more food in your house!
5. It always takes a long time for a habitat to become a real home. Let your habitat rest for more than a couple weeks before checking to see who has moved in.
6. Always let an adult know when you're checking on your habitat, and always put the habitat back the way you found it.



### Write to a Naturalist: Nature Letters

Write to our naturalists to ask a nature-related question. Or share a nature story! Or tell us your favorite thing about East Bay Regional Park District.

Send letters to Mobile Education via snail mail or email, we'll respond within two weeks:

Park Naturalist  
1231 McKay Avenue  
Alameda, CA 94501

or [MobileEducation@ebparks.org](mailto:MobileEducation@ebparks.org)

# Outdoor Recreation



## THE 7 PRINCIPLES of Leave No Trace

1. Plan Ahead & Prepare
2. Travel & Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors



## Leave No Trace 7 PRINCIPLES

**Leave No Trace** is a set of seven principles that helps us enjoy the great outdoors while minimizing our impact on the natural environment. Below are some helpful ways to apply some of these principles when visiting East Bay Regional parks and trails. As the parks are experiencing high visitation, you can set a great example by demonstrating Leave No Trace principles.

### Plan Ahead and be Prepared

To ensure a successful experience in the parks, plan ahead. This includes researching your destination and packing appropriately. Some reminders include:

- Be sure the park or trails are open and that your planned activity will be within your skill level.
- Know the regulations and special concerns for the area you're visiting.
- Prepare appropriately for weather, hazards, and emergencies.
- Schedule your trip to avoid times of high use.
- Print out a map ahead of time from [ebparks.org/maps](http://ebparks.org/maps) in case there are no maps when you arrive.
- Remember essentials such as a face mask, hand sanitizer, sunscreen, snacks, and plenty of water for you and your dog.
- Make sure someone knows where you're going and when you plan to return.

### Dispose of Waste Properly

Leave nature cleaner than you found it by disposing of all litter and pet waste properly.

- Pack it In, Pack it Out! Pack out all trash or use trash cans where provided. Pet owners must pick up dog waste and deposit the bags in trash cans. Dog waste contains toxic bacteria and parasites that can leech into the soil and harm plants, animals, and people, as well as pollute our creeks and streams.
- Take leftover food home, don't leave it for the wildlife to consume.
- Use bathrooms before leaving home.

### Leave What You Find

Take only photos. Do not take things out of the environment.

- Preserve the past: Examine, but do not touch, cultural or historic structures and artifacts.
- Leave rocks, plants, and other natural objects as you find them.
- Stay on marked trails.
- Do not cut branches from live trees or dig holes, and never make graffiti or carve into trees and tables. Keep water and confetti balloons at home, and avoid tying hammocks to trees.








## Leave No Trace Word Find!

N K I L Y J O U T D O O R H S  
 E T I Q U E T T E E F D V N S  
 U N W J P T D I S T A N C E O  
 C U L T U R A L V H M B A G C  
 S L P M F H E Z Q I L A M Q I  
 K R R S P Z W S D C K Z P B A  
 M O E V R R X I O S C P F L L  
 R T P U I A W R L U Q J I G S  
 R H A E N O X P R D R A R M A  
 D E R B C M L R J L L C E X F  
 D R E W I M Z S A R Z I E U E  
 Q S P A P R E S P E C T F S T  
 Y Z L S L G F D D L V Q B E Y  
 U V A T E D J F V G X R O W H  
 E L N E S C K D I S P O S E W

PRINCIPLES	SAFETY
CAMPFIRE	ETIQUETTE
WILDLIFE	PREPARE
ETHICS	RESPECT
RESOURCES	SOCIAL
CULTURAL	DISTANCE
OTHERS	DISPOSE
OUTDOOR	WASTE

Leave No Trace

## Scavenger Hunt

 <p>Find a flower, what color is it? Don't pick it, leave it there for others to enjoy!</p>	 <p>Find a bug and watch it crawl!</p>	 <p>Can you look in a creek, river or lake and spot a fish?</p>
 <p>Listen for birds and try to sing their song!</p>	 <p>Find a piece of garbage and take it to a trash can.</p>	 <p>Find a tree. What kind of leaves does it have?</p>
 <p>Be really quiet and listen for animals. What do you hear?</p>	 <p>Is it a warm day or a cold day? Do you see clouds or the sunshine in the sky?</p>	 <p>Do you see any leaves? What color are they?</p>



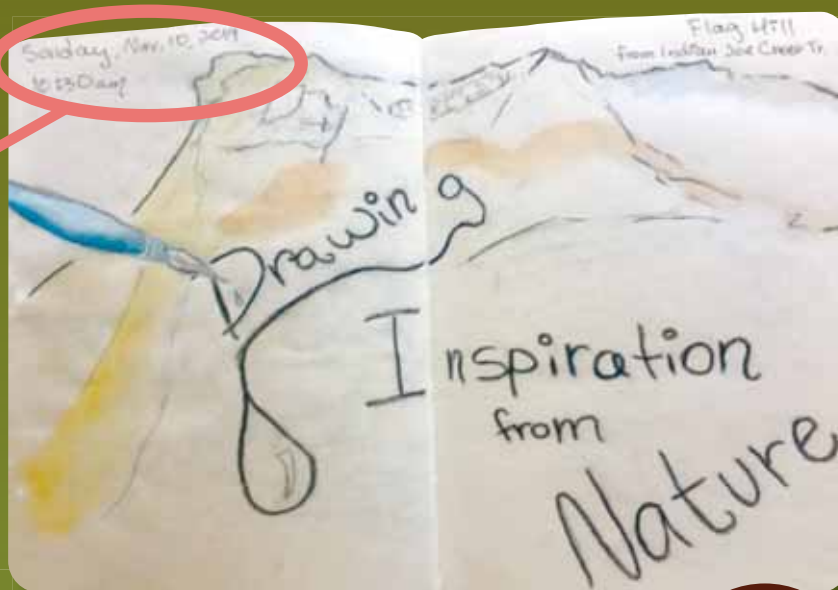
# Sunol Wilderness

REGIONAL PRESERVE

With miles of trails connecting several open space parks, Sunol truly is a wild place that is great for research and reflection. Use these pages to explore from home and record what you find on your next visit.

## Enhance Your Experience Through Nature Journaling

Make observations and ask questions about what you're seeing. Add to your journal each time you visit to see how the park changes over time.



**Bring meaning to your data:** add the date, time, and location.



Apps like e-Bird and iNaturalist can enhance your discovery.

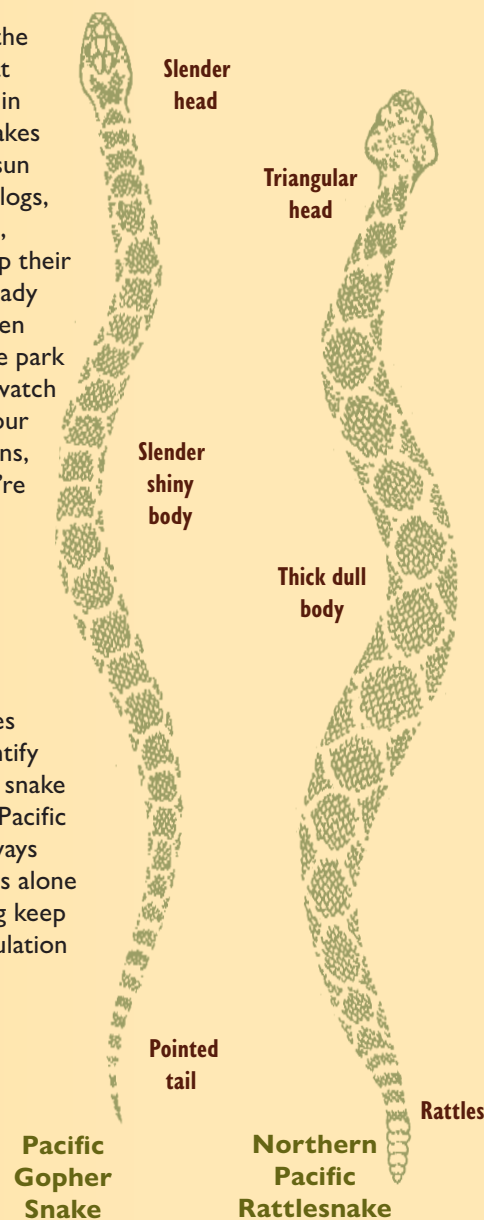
**Make observations:** current weather, water in the creek, bird nests, etc.

**Record what you see:** number of birds, tracks, insects, etc.

## Be Snake Smart: Gopher Snake vs. Rattlesnake

Humans aren't the only animals that enjoy being out in the summer, snakes do too. As the sun heats up rocks, logs, trails, and roads, reptiles warm up their bodies to get ready for the day. When you're out in the park remember to "watch your feet and your seat!" That means, look where you're stepping and sitting. You may disturb a snake friend sunning itself (or it may disturb you).

Use these images to help you identify a Pacific gopher snake and a northern Pacific rattlesnake. Always leave wild snakes alone – they're helping keep the rodent population down.



## Social Media Challenge

Follow us on Facebook @Sunol Regional Wilderness and Instagram @EBRPD.

Share your nature journal pages with us and use #ebparksjournal.

# Tilden

## NATURE AREA



### Pollinator Power!

Did you know that YOU can help scientists learn more about our pollinators? That's right and you can do it just by observing a single flower.

Join us and others by participating in The Great Sunflower Project. Find any flower, potted on your balcony, in your backyard garden or on a walk in your favorite park. You get to decide. Watch it for five minutes or more and record how many visits pollinators make. More information, data sheets and how to input your tally can be found at [greatsunflower.org](http://greatsunflower.org).

Help a bee out and get counting!

### What's Growing in the Kid's Garden?

With warm weather upon us we've been hard at work planting, weeding and watering our fruits and vegetables. Here's one of our favorites from the garden, plus a tried and true recipe to make at home.

Delicious in herb butter, even better in scones. Chives make for a tasty and savory baked treat any time of day. It's a Farm Camp favorite!

#### Garden Scones

Makes six scones

- 1 Tbsp. chives finely chopped
- ½ cup grated cheddar cheese
- 1 ¼ cup flour
- ½ tsp. salt
- 1 ½ tsp. baking powder
- ¼ cup cold butter
- 1 egg
- ¼ to ½ cup whole milk



**Step 1:** Chop chives and set aside

**Step 2:** Grate ½ cup cheese and set aside with chives

**Step 3:** In a bowl mix together 1 ¼ cup flour, ½ tsp. salt and 1 ½ tsp. baking powder

**Step 4:** Work in 1 stick of butter, cubed, using your hands till you have a sand-pebble like texture

**Step 5:** Mix in cheese and chives to the flour and butter

**Step 6:** Mix in 1 egg and ¼- ½ cup milk to flour. Don't over mix!

**Step 7:** Flour hands and make six small round scones about 1/2 inch thick and 2-3 inches wide

**Step 8:** Place on a cookie sheet lined with parchment paper

**Step 9:** Bake at 425° for 20 minutes

### Match the Animal's Tracks and Scat



a.



Bobcat



1.



b.



Brush Rabbit



2.



c.



Coyote



3.



d.



Wood Rat



4.

Answers: Bobcat 2d; Brush Rabbit 4c; Coyote 1b; Wood Rat 3a.



# Volunteer PROGRAM

## Ode to the East Bay Regional Park Volunteers

Dedicated hearts are not easy to find  
It takes special people, generous and kind.  
Here at the Parks, these dedicated and true  
Make the East Bay shine with all that they do.  
These volunteers care so much for our natural spaces  
That they help clean up the hardest hit places.  
Our Docents tell of our parks' great history  
To visitors so that it isn't a mystery.  
At the Bot Garden they care for the plants  
And get lots of dirt on their shoes and their pants.  
Some volunteers, if they have the knack,  
Teach about wildlife, with help from Doc Quack.  
Ambassadors tell people about all our parks  
And Safety Patrol watches from morning to dark.  
Great thanks are owed to our wonderful volunteers,  
We're privileged to work with you and offer three cheers!  
We love you and miss you, you dedicated hearts  
And can't wait 'til you can get back to our parks.

Photo: George Draper



East Bay   
Regional Park District

Healthy Parks Healthy People

2950 Peralta Oaks Court  
Oakland, CA 94605-0381  
ebparks.org



**Volunteers are important to our parks! They help us keep the landscape looking its best.  
In this activity you can be a volunteer too—color the page to make our parks shine!**