



CASE STUDY

FROM PESTS TO PICNICS: ENHANCING PUBLIC PARKS WITH PEST CONTROL

The benefits of being able to access and enjoy a local park are numerous. Parks deliver environmental, economic, social and health benefits for both children and adults.

Part of that maintenance involves pest control. Parks play host to a variety of species of rodents, stinging insects, ants, wildlife and birds. While many of these species play important roles in promoting a healthy ecosystem there are some that can be potentially harmful to park visitors and employees.

Pest control in parks is important for several reasons:

- **Protects Public Health:** Many pests like cockroaches and rodents can carry and transmit diseases to humans, including hantavirus and salmonella. Pest control helps reduce the risk of disease transmission, ensuring an enjoyable park experience.
- **Enhances the Visitor Experience:** The presence of pests can negatively impact the enjoyment and comfort of park visitors. Mosquitoes and flies, for example, can make outdoor activities unpleasant, while the sight of rodents can deter visitors.
- **Prevents Damage to Structures:** Rodents, termites, carpenter ants and carpenter bees can damage park infrastructure, including wooden playground equipment, benches, and buildings, especially historic structures. Additionally, pests can damage plants and lawns, leading to unsightly and unkempt park areas.
- **Allergy Prevention:** Stinging insects can trigger allergies and asthma in sensitive individuals, especially children. Eliminating these threats reduces the risk of an unwanted encounter with an allergy triggering pest.

Sprague Pest Solutions provides pest control services for numerous city and municipal owned parks across its 11 state Western U.S. service footprint. It understands the unique challenges and strategies involved in delivering effective pest control in park settings and how to reduce the risk of an unwanted encounter between pests and humans.

CHALLENGES

The first challenge of performing pest control in parks is that the pests have the home court advantage. Pests live outdoors and visitors and employees coming to enjoy a picnic, hike, work or youth soccer or baseball game are entering a pests' environment. This increases the chances of an encounter.

The second challenge is that parks are more than just picnic tables, pavilions, ballfields and walking paths. Municipal parks can include pools, amphitheaters, museums and historical structures, and even zoos and aquariums.

Sprague Route Manager Joe Escobar provides weekly pest control services for a municipal park district that includes a dozen different and diverse locations from traditional parks with concession stands, restrooms and athletic fields to a historic structures, as well as a zoo and aquarium. "Each location is its own unique environment, and each has a different set of pests that we must



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Joe Escobar

Route Manager
Sprague Pest Solutions

account for," said Escobar. "No two service visits are alike."

One location may have a stinging insect problem under the overhang of a restroom building or picnic pavilion or there could be cockroaches inside a concession stand in another.

Escobar said one of the more unique pest challenges he encountered were ants infesting the boat houses at park's marina. Using a traditional spray treatment was out of the question since the structures were over water so baits had to be deployed to eliminate the problem.

Another location in the park system had a collection of the almost 200-year-old historic structures that were infested with powder post beetles (they also had seasonal issues with carpenter ants and bees) The all-wooden structures also attracted yellowjackets and the gaps and crevices in the old construction provide mice with easy access.

"The area surrounding the structures was heavily wooded and had lots of vegetation, perfect harborage locations for the pests," said Escobar. "And the wood siding was a natural attractant." The most challenging location in the park system was the zoo and aquarium. Escobar dealt with everything from German cockroaches in an animal food preparation kitchen to rats living under a scale used to weigh elephants.

SOLUTIONS

With each park location having a different setting and purpose, as well as different pest species and pressure levels, Sprague designed pest programs that stacked the effects of both preventative and remedial solutions.

The programs were based on Integrated Pest Management (IPM) principles that combined multiple strategies, including trapping, traditional pesticides (where allowed), sanitation, exclusion and client education.

For the powder post beetles in the historical structures, a fumigation treatment was not possible, so Escobar made targeted applications of a boric acid-based dust. For the yellowjackets and mice he designed a program that emphasized exclusion and the use of insect and snap traps. Adding to the challenge was the park district's request to have the traps placed discreetly and not in highly visible locations where visitors could see them.

Due to the sensitive nature of performing pest control around animals, the solutions Escobar deployed at the zoo had to be effective against the target pests but not impact the facility's crawling, walking, flying and swimming residents.

In the animal food preparation area, gel-based bait was used to knockdown the cockroach population, and sanitation protocols reinforced to remove food waste that was attracting the cockroaches. For the rat problem under the weight scale, baiting was not an option, so exclusion was the initial approach. However, it was decided to remove the scale and eliminate the root cause of the issue.

The keys to a successful pest control program in parks focuses on the following elements:

- **Regular Inspections:** Keep eyes on potential pest hot spots and conduct regular inspections to identify signs of pest activity and conducive conditions. Getting ahead of pest issues is important to preventing more serious, time consuming and costly solutions.
- **Sanitation Protocols:** Work with the client to establish consistent sanitation and cleaning protocols for public facing and behind the scenes areas. Closing dumpster lids, regular

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garbage removal and cleaning of food service and preparation areas will reduce pest attraction.

- Remove of Conducive Conditions: Communicate regularly with park maintenance and landscape staff to manage landscape, vegetation and water sources to reduce pest harborage and breeding sites.
- Exclusion: Implement measures to exclude pests from park buildings and facilities. This may include sealing cracks and gaps, installing screens on windows, doors, utility openings and vents. Record what work needs to be done and follow up to ensure it was taken care of.

RESULTS

By crafting targeted, customized solutions – both preventive and remedial – for each location it serviced within the park system and maintaining open, consistent lines of communication with the client, Sprague it was able to reduce pest pressure levels, improve the visitor experience for the thousands of guests who enjoyed the parks annually and do so with minimal disruption to the park's operations.