



# Sandy Beach Park & Stanley Park

*Sandy Beach Park and Stanley Park are located in Calgary's southwest quadrant along the Elbow River. Both are riverside parks and lie within the Elbow River floodplain. Sandy Beach Park is surrounded by three nearby off-leash dog areas (River Park, Riverdale, and Britannia). Sandy Beach is not an off-leash area, but it does have off-leash river access. Stanley Park is located further east, about a 30-minute walk from Sandy Beach. Before swimming at either park, check for any water quality advisories before entering the water.*

## Coexisting with Wildlife

Sandy Beach and Stanley Park both exist in a floodplain. These parks not only provide many amenities for people, but are home to an abundance of wildlife. Downy/Hairy Woodpeckers and Northern Flickers are present throughout both parks, and can be frequently seen chipping away at Balsam poplar trunks looking for food. When walking along the Elbow River, it is common to see North American beavers, Common Mergansers, Mallards, and Canada Geese. These parks provide a wonderful example of how people, plants, and animals can coexist. We can respect wildlife by keeping our distance and ensuring we keep our parks clean.



## Look Closely at the Riparian Area

Have you noticed the trees, shrubs, and plants on the side of the river? This vegetation is a special habitat called a riparian area. It is a transition zone that exists between aquatic and terrestrial ecosystems. You might see plants like wolf willow, red-osier dogwood, and chokecherries. Many plants and animals require riparian areas to survive. Animals like deer, coyotes, beavers, muskrats, fish, and many birds rely on riparian areas for food, water, and shelter. Riparian areas provide many important ecological services, such as filtering pollutants, reducing the impact of floods, supporting biodiversity, and protecting riverbanks from erosion. Ultimately, a lack of riparian vegetation can result in an unhealthy watershed.



## Did You Know?

Both parks suffered extensive damage from the 2013 Calgary flood, but significant redevelopment has occurred since that time. Although infrastructure (human-made) was damaged, floods play an integral role in the ecosystems of both parks. The balsam poplar forests found at Sandy Beach and Stanley Park require floods to survive. These trees require the nutrient rich silt and water provided by floods in order for their seeds to germinate and grow.





# Sandy Beach Park & Stanley Park Study

**Overview:** These activities provide hands-on scientific learning opportunities, which will enhance your students understanding of the connection between riparian areas and water quality. Students learn that land and water are closely connected. Lastly, these activities promote environmental stewardship by showing your students how they can have a positive impact on the environment.

## Activity 1: Site Sketch

Investigate riparian areas in Sandy Beach Park or Stanley Park. Choose a spot to sit and draw a sketch of the Elbow River and riparian area. Look upstream: what types of plants are found on the right and left side of the stream? Include the major landscape, stream features, and wildlife. Students should include as much detail as possible: identify 2-3 plants in the riparian area, weather conditions, time of year, sounds, and anything else that is relevant. What features in a riparian zone make it different from the surrounding upland area?

## Activity 2: Riparian Site Assessment

Choose a site perpendicular to the river. One adult volunteer per student group is recommended for this activity. Groups will be assigned a different area within the site and will be responsible for collecting data. Have students:

- (A) Record *species richness* by counting how many different types of trees, shrubs, sedges, grasses, and forbs (flowering plants) they see.
- (B) Record *species abundance* by counting how many individual plants there are of each species. (Ex. 6 Wolf willows, 5 Balsam poplars, etc.) Did you know that deep-rooted plants like trees, shrubs, sedges, and rushes improve bank stability far more than shallow rooted plants like grasses and forbs?
- (C) Assign a percentage for the following categories: live vegetation, decomposing plants (dead vegetation or sticks), rocks, and bare ground (e.g. 75% live vegetation, 10% decomposing plants, 10% rocks, and 5% bare ground). Bare ground decreases bank stability, so a mixture of types is ideal.
- (D) Record wildlife observed in the area, including the species richness and abundance, plus any animal evidence (e.g. feathers, nests, bones, scat, etc.).

Combine the students' observations and discuss them as a group. Have the students draw conclusions on whether the riparian area is healthy, or if it needs improvement. What features may improve the riparian area?

## Activity 3: 2013 Flood

Have students spread out and guess how far the water travelled from the riverbank during the 2013 flood. Ask students to walk upland to the point where they think the floodwaters reached. **Stanley Park:** start at the beach area by the playground – after the students are done guessing, walk south past the playground, past the tennis court, past the pool, and past the parking lot. Have students stand on the sidewalk on 42 Ave SW and have them look south. The water traveled to the other side of the road in this spot! **Sandy Beach Park:** start on the south side of the Sandy Beach bridge by the beach facing the BBQ/picnic area. After the students are done guessing, walk to the staircase. In this spot, the water reached the stairs and completely covered the picnic area!

## Activity 4: Habitat Restoration

Using natural materials to stabilize riverbanks and mitigate flooding is known as bioengineering. Do you notice any bioengineering or bank stabilization projects happening in Stanley Park, Sandy Beach Park, or elsewhere? Using what you know about plants, as well as the background info on this page, how might you use them to stabilize a riverbank and prevent soil erosion. Draw a diagram demonstrating your ideas.



# Visiting Sandy Beach Park or Stanley Park?

What you need to know.

## Park Etiquette — [Click here for bylaws related to parks and pathways](#)

- Stay on designated trails at all times, unless otherwise posted. This helps to protect the habitat of plants and animals that live in the park.
- Use quiet voices. Running and yelling will scare away wildlife and reduce the opportunities to view these species.
- Do not disturb or feed wildlife, including birds.
- Look but do not remove vegetation (including flowers and berries). These plants could be food, nesting material, or a rare native species.
- Do not litter. Place all garbage, recycling, and compost in appropriate bins or take them back to your school.

## Nature Kit Information

Calgary Parks would like to encourage you to explore the amazing features and landscapes of Sandy Beach Park and Stanley Park. To enhance your experience, we have a free learning kit available for you to use which includes:

- A map of the park or region
- Biofacts (bone clone mammal/bird skulls, track and scat molds, egg replicas)
- Bird plushes with audio of bird call or song
- A tree cookie (cross section from a known tree species)
- Alberta natural history field guides and booklets relevant to the topic of the kit
- Printed resources to supplement the park study activities
- Various laminated photographs and information on local plant and animal species
- Nature BINGO activity page

## Renting a Nature Kit

- Kit is available for a one-week duration FREE of charge.
- User is responsible for picking up and dropping off the kit at the designated location.
- If the kit is not returned, or materials are missing or damaged, the user will be charged a replacement fee.