Backyards for Kids

Fresh Ideas for Outdoor Living

+ Step-by-step instruction
+ Projects to fit all budgets
This two-story lookout tower and swing set in Southern California appeals to adults as well as children. The homeowners named it Snakes Island for the decorative snakes that adorn the path leading to the lower garden area. The entire family likes to gather here after a cookout with the swing seating plus Adirondack chairs, there’s a perch for everyone. The view from above is of the neighboring apple orchard and vegetable garden.

**Design**
The stone-slabbed concrete columns supporting the platform posts are attractive and ensure the structure can hold many visitors. Stone and other natural details in the design pair well with the native plant garden. The high platforms for the tower provide roomy and shaded space below so adults can comfortably keep close watch. Generous cushioning at the base is needed for a slide of this height.

**can I do this?**
The height of the platform makes this a two- or three-person job. Hip roof construction requires expert carpentry skills. Building and facing columns require expert masonry skills. You will likely require professional assistance. The homeowner who constructed this is a landscape architect.

**DEGREE OF DIFFICULTY**

1 2 3 4 5

(difficult)

**WHAT YOU’LL NEED**

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 x 8 support posts</td>
<td></td>
</tr>
<tr>
<td>4 x 8s and 4 x 10s for</td>
<td></td>
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<tr>
<td>beams</td>
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<tr>
<td>4 x 8s for rafters</td>
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<tr>
<td>2 x 6s for decking</td>
<td></td>
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<tr>
<td>2 x 6s for rails and 2 x 6s for top rails</td>
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<tr>
<td>2 x 2s for pickets</td>
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<tr>
<td>Concrete blocks: 8 x 8 x 16 and 10 x 8 x 16</td>
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</tr>
<tr>
<td>String line</td>
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<tr>
<td>Bricks</td>
<td></td>
</tr>
<tr>
<td>Stone</td>
<td></td>
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<tr>
<td>Slide</td>
<td></td>
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<tr>
<td>Swings</td>
<td></td>
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<tr>
<td>Bench swing</td>
<td></td>
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<tr>
<td>Rope for swings and hand-rail</td>
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<tr>
<td>Lag bolts and machine bolts</td>
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<tr>
<td>Jost hangers</td>
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<tr>
<td>Deck screws</td>
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<tr>
<td>Veneer ties</td>
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<tr>
<td>Concrete mix</td>
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<tr>
<td>Mortar mix</td>
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<tr>
<td>Pea gravel</td>
<td></td>
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<tr>
<td>Mulch or mats for landing areas</td>
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</tr>
<tr>
<td>4-foot level</td>
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<tr>
<td>Nail plate connectors</td>
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<tr>
<td>Wood shingles</td>
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<tr>
<td>Jigsaw</td>
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<tr>
<td>Hip square</td>
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<td>Trowel</td>
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<tr>
<td>Eyebolts</td>
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<tr>
<td>Pan head screws</td>
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<tr>
<td>Roofing nails</td>
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<tr>
<td>Rebar</td>
<td></td>
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<tr>
<td>4” adjustable brackets</td>
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</tbody>
</table>
Building the Tower and Swing Set

1. **Construct the Tower Columns**
   - **Clear the site.** Mark and level the spaces for the concrete columns, excavating for the concrete footings 12 inches or per local codes. Pour the concrete footings using rebar set into the concrete for support. Four pieces of rebar should extend from the footing to the top of the column. Build columns around the rebar, using two layers of 8 x 8 x 16 concrete blocks followed by 16 x 8 x 16 blocks. Arrange the concrete pier blocks columns with gradual steps inward to create a Craftsman-style, "slight leg" or tapered look. Build one column at a time, using mortar between blocks and then filling all blocks with mortar for added stability. Use horizontal rebar to form the center of the column at all levels until the column is at the desired height. Set blocks for the remaining three columns, using string lines to ensure they are all level and square. Let cure.

2. **Set the Posts**
   - **Install adjustable brackets.** Set the top of each concrete block tower column. Affix an 8 x 8 post, using string lines to ensure the posts are in alignment. Mark the location for the swing post, dig an excavate post hole 24 inches deep or below frost level. Pour 3 inches of pea gravel for drainage into the hole. Wrap the bottom of the post with builder's felt and drop the post into the hole. Use a level to ensure it's plumb in both directions. Stake securely. Pour concrete mix around the post. After pouring, check that it remains plumb, let cure. Once the swing post is secure, face it with mortared 8 x 16 x 16 concrete blocks, using vapor ties to secure the blocks to the post every 12 inches on center.

3. **Build the Deck and Swing Frame**
   - **Mark tower posts.** Use a square to create decorative braces using 2 x 4's screwed to the 2 x 10 beams. Attach 4 x 10 beams, using machine bolts to the pilars and outside of the 8 x 4 posts, creating a level box. Affix the front beam to the swing post using machine bolts. Install 4 x 8 joists across the 4 x 10 support beams spaced 22 inches apart, level into the 4 x 10 beam 1 inch and secure with angle iron brackets and adding decking on top using deck screws.

4. **Build the Ladder**
   - **Use 2 x 10's with angle cuts for stingers.** Use lag bolts to affix the stingers to the platform. Affix cleats for handholds, cleats are made of 2 x 4 screws to the stingers level to the ground and stairs. The distance from the top of the wood cleat to the bottom rail is approximately 4 vertical inches. Attach 2 x 6 treads on top of cleats. Use rope for handrails, affixing securely with eyebolts. Do not leave excessive slack in the rope.

5. **Construct the Hip Roof and Railing**
   - **Consult a contractor or roofing manual to frame and build the roof.** This example was made of 3 x 10 girters attached to each post and it’s finished with wood shingles on top. Use 2 x 6 x 6 for the railing. Attach 2 x 1 6 inches apart for balusters.

6. **Face the Columns with Stone**
   - Use a pen to mark the dimensions of the column faces on plywood sheets on the ground. Lay out the pattern for the stone facing. Make cleats as necessary to fit the pattern. Mint a concrete pier block column with rebar and use a straight trowel to apply a ¼ inch thick coat of type S or N mortar. Coat one side of the column at a time. Start at the bottom, transfer stones to the wall. Press each stone into the mortar. The stone should be difficult to pull off, if it doesn’t stick adequately, back but with additional mortar. The builder also used vermiculite ties to help tie the stone and set mortar back into the column. Avoid moving stones once the mortar has began to harden. Use small stones in the gaps to brace if necessary. Move up the column. Wipe off any mortar that gets on the stone facing as soon as possible.

7. **Top the Columns**
   - **Dry-lay bricks around the top of the column, using cleats as spacers for mortar.** Cut out to fit around the wood posts. Remove the bricks then work on one column at a time. Spread a layer of mortar on top of a stone-faced column and place the first brick. Repeat to create the desired pattern, butting each brick end as you go. Use a trowel to slip off any mortar that squawks out and wipe off any mortar that gets on the bricks as soon as possible. Once the columns have hardened, use a mortar bag or small pointed trowel to fill the joints. Let cure.

8. **Attach the Swings and Slide**
   - **Attach swings and slide according to manufacturer’s directions.** Align 14 feet of clearance at the base of the slide, and secure there’s adequate cushioning. If desired, attach a platform bench swing on the platform to the hip picks in the roosting structure using eyebolts, making sure it hangs level from the angled rafters.
Harvesting your own food is as satisfying as it is delicious, and this kitchen garden makes growing produce look gorgeous. The homeowners pride themselves on entertaining with meals where everything is grown on site. Strawberries, corn, peaches, apples, and tomatoes are some of their favorite choices.

**Design**

Raised beds are the most efficient way to grow bountiful produce. The soil warms earlier in the spring and drains well. And without foot traffic, soil doesn’t get compacted. Orient your beds to maximize sun exposure. Redwood or cedar boards are good wood choices; they naturally resist rot. Finishing details such as tenon trim connecting the framing boards and 2 x 8 board caps that can be used as benches help create a polished look. These beds are 5 feet by 7 feet, make sure when you design yours that you’ll easily be able to reach the center of each bed from the edge.

**WHAT YOU’LL NEED**

- 4 x 4 posts, preferably redwood or cedar
- 2 x 6 redwood panels for interior
- 1 x 6 horizontal siding, preferably redwood or cedar
- 2 x 8 redwood or cedar for caps
- 1 1/2 x 2 redwood or cedar trim
- 4 x 4 redwood or cedar for rungs
- Lag bolts and washers
- Galvanized deck screws
- Crushed aggregate
- Concrete mix
- 6-mil plastic sheeting
- Wood staples
- Bake
- 1/4-inch mesh hardware cloth
- Garden shears
- Planting mix
- Water-based sealant

**can I do this?**

Assembling the beds requires basic carpentry skills. Having an assistant to help lift the frames will make the project easier.

DEGREE OF DIFFICULTY

1 2 3 4 5 (moderate)
**Building the Beds**

1. **Measure and Seal the Wood**
   - Measure and cut the wood to size. The 4 x 4 posts should be the depth of the bed plus 12 inches to buy in the ground for support. Drill 4 x 4 post holes for each post. Cut the frame into position and check to make sure it's level and plumb. Secure with temporary stakes so it doesn't move. Pour concrete mix around each post. After pouring the concrete mix, recheck that the raised bed is still plumb. Let the concrete cure.

2. **Start the Frame**
   - Build the beds using 2 x 6 redwood paneling. Screw the 4 x 4 stringers to the 2 x 6 redwood paneling to create a frame. Then secure the 2 x 6 interior panels of redwood that will line the inside of the raised beds to the inside of the frame using galvanized deck screws.

3. **Set the Frame**
   - With a helper, fit the bed right side up. Move it into position in your yard. Mark the corners, and move the bed aside. Dig a 12-inch-deep hole for each post. Pour 3 inches of crushed aggregate for drainage into each hole. Set the frame into position and check to make sure it's level and plumb. Secure with temporary stakes so it doesn't move. Pour concrete mix around each post. After pouring the concrete mix, recheck that the raised bed is still plumb. Let the concrete cure.

4. **Finish the Frame**
   - Use screws to attach 1 x 6 horizontal siding to the frame using galvanized deck screws. Sink the screw heads and mortar cut the corners. Then attach 2 x 6 trim pieces over the joints of the 1 x 6 siding. Place 2 x 6 redwood caps on top of each side of the planter so that the faces hang just over the frame, affix to the posts and siding using lag bolts and washers. Counter sink to recess the heads.

5. **Line and Fill the Bed**
   - Cover the interior 2 x 6 redwood panels with 6 mil plastic sheeting to prevent wood rot, and so that the soil doesn't push the exterior boards out of alignment. Staple in place, making sure to keep the vertical surfaces of the interior panels. Run the bottom of the empty bed to level ground. Line the bed with hardware cloth to keep out pests. Trim the cloth with shear to fit around corner posts. Fill the bed with a planting mix of topsoil, compost, and peat moss so that it is about 4 inches below the top of the bed frame. Rake the soil smooth.

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**ASSOCIATE GARDEN EDITOR**

**JULIE CHAI ON good soil**

Amend your perennial and vegetable beds every time you plant. Well-rotted manure, compost, worm castings, or soil conditioner will make your plants happy. And when you’re getting ready to plant, the soil should be neither too wet nor too dry. A handful squeezed in your fist should form a ball that crumbles apart, yet still feels moist. Be sure to plant so that once they get going, your tall vegetables won’t block sunlight from their neighbors.