Build a beaver dam

Build your own beaver dam out of household items and see how your skills compare to the real deal.

**What You’ll Need**

- Water-tight tray for building in, or use a length of tin foil to create a river with the edges folded to stop water spilling out.
- Small bucket or jug of water.
- Selection of materials for dam building. Natural and recyclable is best, but it could also be a good use of anything lying around at home that can be added to a pile and wedged together (paper scraps, card board, wood, plastic, stones, grass etc).
- Modelling clay (playdoh/plasticine/clay). This is the key to a good dam, acting like mud in real beaver dams.
- A towel or old cloth to mop up, particularly if you’re inside.
- (Optional) Some lego/playmobil people to plant downstream.

**Step-by-Step Instructions**

1. Head outside or do this in a kitchen/bathroom where water spillage won’t cause any damage! Then set up your foil river or plastic tray, with a slight slope to it.
2. Pour water slowly in from one end (‘up stream’) and watch it flow down the slope and collect in the other end.
3. Build your dam across the middle of your ‘river’ or tray; use your creative engineering skills to think how best you can stick it all together and remember, beavers use the natural materials all around them.
4. (Optional) To make things more realistic, add a few lego or playpeople characters stood on the lower slope of your river/tray, to represent people and things downstream of the dam.
5. Pour water slowly in at the top of your slope, above the dam, and time how long it takes to fill up the other end. Does it get through at all? Can your dam hold water long enough to float a small object in it? Could you add anything else to allow it to filter slowly through?
6. Can you tweak your design or build your dam differently so that it holds water for longer or withstands the flow of your river better? Time how long it takes for all the water to reach the other side, then add different materials and time it again.

**WARNING:** Please inform an adult that you’re going to do this and select a location that cannot cause water risks.

**Key considerations**

The overall aim here is to have fun experimenting with the science of engineering & water movement, as well as learning what beavers achieve while their beavering away.

**Before you start the activity consider:**

- What you think the best dam construction materials might be and why?
- How much water do you think your dam could hold?

**After you have completed the activity consider:**

- What changes could you make to hold the water back further?
- How much effort would you need to maintain a dam in the wild for the next 10 years?
- Chat with someone in your family about what our real rivers might look like with beaver dams here and there upstream of flooded towns.

Send us a photo of you and your family building your dam to info@beavertrust.org or upload it to social media and tag us @beavertrust to join our colony at the lodge.