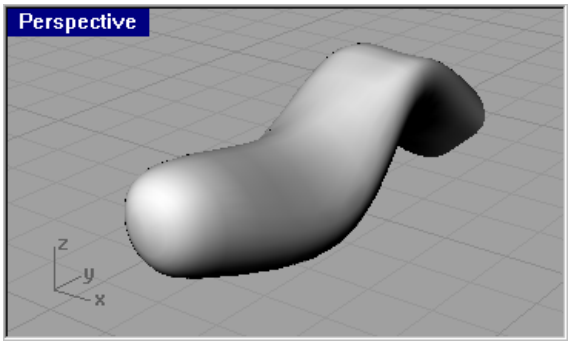
How to Make a Lofted Surface with a Smooth Tip



This demonstration shows:

- How to create a tubular lofted surface end with a smooth tip.

You must know:

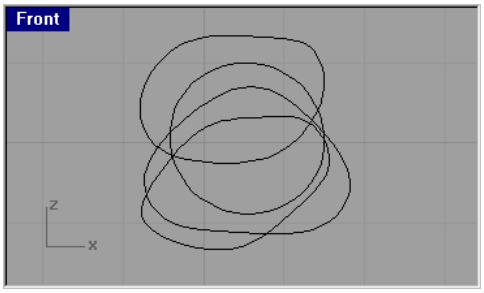
- Curve drawing (**Curve**)
- Lofting (**Loft**)
- Turn control points of a surface on (**PointsOn**) and off (**PointsOff**)
- Object snaps
- Move objects (**Move**)

To create a lofted surface with a smooth tip:

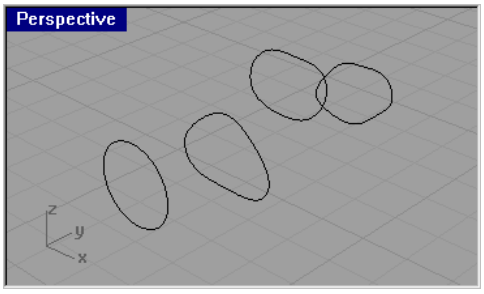
The completed model with steps is loft01.3dm.

1 In the **Front** view, use the **Curve** command to create several closed curves.

Note: If you want the tip to be perfectly round, make sure the cross section curve next to the tip is planar and convex. (If you stretch a rubber band around the control points of a convex curve, the band will touch all control points).



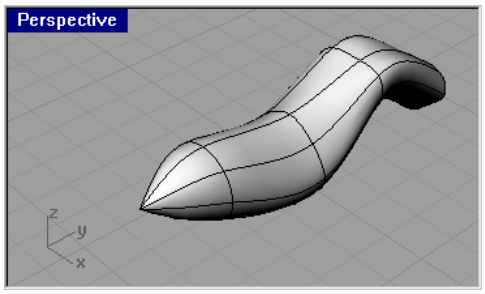
2 Drag the curves in place in the **Perspective** view.



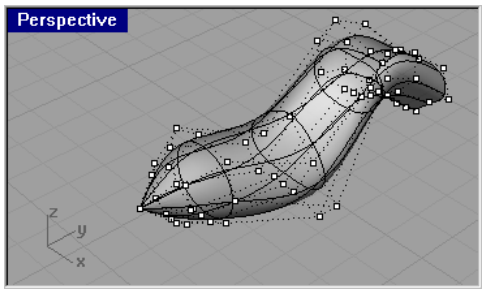
3 Use the **Loft** command with **Point** option to create a surface.

Pick a starting point in front of the curves and then pick the rest of the curves.

This loft will have a sharp tip.

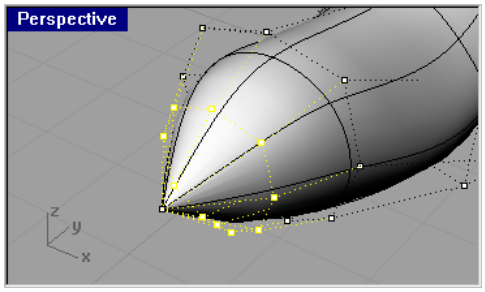


4 Use **PointsOn** to turn on the control points of the lofted surface.

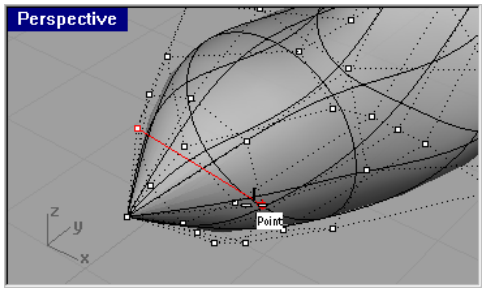


5 **Zoom** in on the tip of the loft.

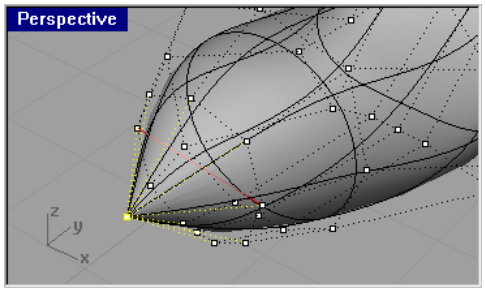
There is a ring of control points near the tip.



6 Draw a **Line** between control points on the opposite sides of the loft using **Point** object snap.



7 Select the control point at the tip of the loft.



8 Use **Move** combined with **Point** and **Mid** object snaps to move the control point from the tip to the middle of the line.