

**Table 2-1.** Characteristics of Various Suction Dredges

Dredge Size & Type	Nozzle Size (inches)	Engine Size (horsepower)	Capacity		Dredge Pros	Dredge Cons
			Cubic yards per hour	Tons per hour		
Backpack dredge	2	2.5	0.5 – 2	0.7 – 2.9	Light and easy to pack in and out of the location. Good for prospecting and sampling. With suction nozzle it can be used in very shallow water.	Small capacity, not good for production.
Sampling dredge	3	5	1 – 3	1.5 – 4.5	Still lighter and smaller than a 4-inch and can move a lot more material than the 2 inch.	Still low on production. Portability is pretty good for remote places.
Sampling/small scale production dredge	4	6.5	1 – 5	1.5 – 7.4	The smallest of the production dredges but still good at sampling for pay streaks.	Heavier and more work to put together and take apart. Fairly mobile still, this makes it good for more remote sites.
Larger scale sampling/production dredge	5	9 – 13 or 2 x 6.5	2 – 10	2.9 – 14.9	Good for larger operations. Still good for sampling, but on a larger scale. Hose is flexible and can be operated by a single dredger.	Heavier to disassemble and move around. May have multiple or larger engines.
Recreational or smaller commercial production dredge	6	13 – 32  or may have 2 engines	6 – 17	8.9 – 25.2	A useful size for someone who has found a sizable pay streak and wants to get all the gold out that is possible.  Can move rocks, gravel, and sand up to about 5 inches across without a plug up of the hose or jet.	Heavier unit.  Larger nozzle makes it harder to sample with, although you still can sample larger rivers to locate gold in bigger areas.  This hose isn't as flexible as a smaller dredge, although one person can handle it. Two person teams are better because the rocks are uncovered so quickly by