**The distinction between habitual and goal-directed action is fundamental to behavioral research (Dolan & Dayan, 2013). Habits form as stimulus-response pairings are “stamped in” following reward. In contrast, goal-directed behavior requires planning over a causal model. Many existing models portray habitual and goal-directed systems as competing for behavioral control (Daw, Niv, & Dayan, 2005), but evidence suggests they may be codependent. Goals exhibit many habit-like properties, such as automatic activation under contextual cuing (Huang & Bargh, 2014) and susceptibility to unconscious reinforcement (Custers & Aarts, 2005). Also, in complex real-world scenarios, selecting a goal out of potentially infinitely many candidates seems like an intractable problem, yet people solve it with ease – suggesting that a more efficient decision making system is influencing goal selection. We propose that goal selection can be under habitual control. Across two experiments, we demonstrate that people form habitual goals which are “stamped in” by reward, but which guide behavior through causal forward-planning. The role of habitual control in goal-directed action has implications for a range of issues, including the contextual nature of cognitive skills, the nature of addiction, and the origin of the moral “doctrine of double effect”.**