

Example 11: Stag Hunt

A sentence in Discourse on the origin and foundations of
inequality among men (1755) by Jean-Jacques Rousseau
discusses a group of hunters who wish to catch a stag.
They will succeed if they all remain sufficiently attentive.

but each is tempted to desert his post and catch a hare.
Interpretation of the sentence:

Each of a group of hunters has 2 options:

he may remain attentive to the pursuit of a stag,
or catch a hare. If all hunters pursue the stag,
they catch it and share it equally; if any hunter
devotes his energy to catch a hare, the stag escapes
and the hare belongs to the defecting hunter alone.
Each hunter prefers a share of the stag to a hare.

Strategic game:

Players: hunters

Actions: Each player's set of actions is {stag, Hare}.

Preferences: ^{All players} Choosing stag is ranked highest, followed
by choosing hare, followed by choosing
stag and one or more players choose Hare.

For 2 hunters:

H1 \ H2	Stag	Hare
	Stag	Hare
Stag	(2, 2)	(0, 1)
Hare	(1, 0)	(1, 1)

The variant of the 2-player Stag Hunt has been
suggested as an alternative to arms race game
(all the security dilemma).