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TYPES OF COMMONS IN NORWAY AND SWEDEN: Concepts for a precise description of the legal institutions.

Introduction

Institutions have consequences. The different institutions governing the use of forests resources, have different consequences both judged from a societal perspective (e.g. biodiversity, landscape quality, supply of timber) and judged from the individual perspective of people depending on forest resources for their livelihood(e.g. work, pasture, fuel wood).

The complexity of various local constellations of users and institutions and the many efforts around the world to change and improve the management of common property resources in forests, make the question of what is the best design of an institution a central task for social science. One strategy for learning about what works well and what does not work well enough, is to study cases with a long history of management (Ostrom 1990).

The forest commons of Norway and Sweden have existed since pre-medieval times in one form or another. They have changed from being the open access "wastelands" around the local communities in pre-medieval time by way of being the King's commons open to be used by the people of the local communities, later to become the more or less personal property of the sovereign. The current system of commons in Scandinavia grew out of the struggle for control of the various forest resources among the King, the growing group of capitalists looking for investment and profit, and the local farmers. The shifting fortunes of monarchy, the industrialisation of the economy, and democratisation of the polity all affected the system of forest commons that emerged.

Today most students will concur that the forest commons of Scandinavia are managed sustainably in the more limited sense of regeneration of the timber¹. And they appear to be healthy businesses operating to the benefit of those with rights of common as well as in service of the local community.

The long history of adaptations to shifting power constellations and resource interests has led me to the view that a closer study of the institutional structures of the various commons of Norway and Sweden will give some insights into how long-lasting and well functioning forest institutions may be designed. But even within Norway the variation among the commons is rather large. The distinction between state commons and bygd commons² is well

¹The acid rain which may be threatening the survival of large forest areas are then left out of consideration. ²«Bygd» is a Norwegian word which doesn't translate to well to English. Its original meaning is something like «local community». Also current usage of the word would suggest some kind of local community independent of more formally defined units such as school districts, parishes, or municipalities. Earlier in our history the bygd would be used for the smallest administrative unit, the local law district, and later the parish. In Sweden the word would mean the same. But in conjunction with commons this translation will not give the right associations. Because the areas burdened with rights of common throughout our history usually were tied to users from some specific local community, the bygd became tied to a certain area recognized as «their» commons. During the past 800 years the original usage of the word «bygd» has turned around at elast in the legal language, and today the bygd, in relation to commons, is defined in terms of those who have rights of common. The bygd is defined as comprising of those farm enterprises which have rights of common in the area

known. But how can one understand the differences within each group? And what are the differences between a bygd commons and other land owned in common? Current theory on common property in resources does not say anything about internal differentiation of institutions. A first step must then be to develop ways of describing the differentiation.

The present paper will use the categories developed in the English law of property to give a detailed and precise description of the property rights regimes governing the resource utilisation in the various cases of common property in timber land.

Ways of describing a commons

A commons may be conceived either as an actor system or as a non-actor system. In the latter case the commons is an arena where several actors engage in struggles or co-operative ventures concerning the values inherent in the area, but no single actor can be said to be a "system-responsible" actor, representing the commoners as a collective.

Considered as an actor system the commons must in some sense have incorporated itself. One of the actors with interests in the commons or some new body have taken on the task of representing the interests of the commoners in governing the commons and this is acknowledged in some way by the external community. In Norway and Sweden this is done in acts defining the system of governance for the various types of commons. The success of these commons units in their tasks depends on the political and economic environment as well as the local struggles among the commoners.

	TYPE OF DATA		
LEVEL	ABSOLUTE	DISTRIBUTIONAL	RELATIONAL
CONTEXTUAL	*acts enacted by parliament	*degree of delegation of powers relative to other types of systems	*openness in the government and parliament designing and enacting acts
DIRECT CHARACTERISTIC OF A RESOURCE USAGE SYSTEM	*size, *profit, *decision making proceedures	*size-rank among the resource usage systems	*number and type of co- operative or antagonistic relations with other comparable resource usage systems
CONDITIONAL	*property rights to resources, *level of details in the bylaws	*distribution of income according to source	*number and type of links to subsidiary or dependent economic entities

EXAMPLES OF DIFFERENT TYPES OF DATA FOR COMPARATIVE STUDIES OF RESOURCE USAGE SYSTEMS

Source: Adapted from Berge (1989)

In describing the commons we should keep in mind the various ways the social and natural contexts and the internal conditions shape activities and outcomes for the various units. A commons as an actor in a social system can be described in at least 9 different ways.

recognized in law as a «commons» (both state and bygd commons). Since translation to English in this case is seen as inadequate, the word "bygd" will be used.

What are the relevant variables differentiating types of commons?

In developing a description of different types of common property we need to keep in mind the processes shaping the various instances of them. No legal entities have a longer uninterrupted history in Norway¹. To really understand them as human creations we need to understand their history. However, the dynamics of law in history will have to be left out here, the present paper will be concerned with the current situation of those entities "encumbered with" rights of common. But it is assumed that the evolution of legal concepts will reflect deep social forces and thus be among the most significant indicators of variation.

The property rights regime called commons is usually defined as "owned by an identified group of people, which has the right to exclude non-owners and the duty to maintain the property through constraints placed on use" (Hanna, Folke, and Mäler 1995, p.18) This definition lumps all kinds of co-ownership together. Alone it is insufficient to differentiate among various types of commons. The same authors further note that "Such regimes are often implemented for common pool resources, those which are difficult to divide or bound." (Hanna, Folke, and Mäler 1995, p.18). Applying this to forests we note that forests are not difficult to divide or bound in general, neither are the most important resources within forests to which rights of common property in forest resources and their diversity can hardly be found in technical resource characteristics. The specific historical instances of "commons" are more various than either the definition allows or the analytical distinctions of various user situations presumes.

In legal terms the Norwegian commons are not directly "owned" by "a group of people", not even primarily "enjoyed" by a group of people. However, there is a group of people exercising rights and performing duties. These people remove value from the commons observing constraints to maintain its resources in good condition, and they guard it against illegal users. However, the linking of people to rights and duties of ownership, and the linking of rights and duties of ownership to resources are variables. Also the relation of owners to non-owners is a variable.

These variables are at the heart of the legal conception of common property as developed in Norwegian Law. They institutionalise the collective experience and historical adaptations of people depending on these resources, tempered by the perceptions of the legal profession and the lawmaker. Most of the variation has been introduced during the last 3-400 years and to a very large degree driven by case law as need for adaptations to new circumstances arose.

Two significant processes have shaped the development. The most important external impact for Norway is simply that the King began to sell off "his commons" in the 17th century². The King could sell only what was his: the ground and the remainder. He could not sell the rights of common. The rights of common remained undisturbed.

¹ The legal history of the property rights regime of commons in Norway makes if fair to say that they are outstanding examples of "indigenous" knowledge applied to resource management. Students of the rights of common are unable to find any trace of foreign impact on the development of the rights of common. See e.g. Rygg (1972). The "odelsrett" institute has the same long history and also seems rather "indigenous", but its legal history is more variable.

 $^{^2}$ The process through which the King came to regard the commons as his property and the degree of control implied is an interesting topic. It is however fairly clear that the Swedish king had more extensive control of "his commons" than the Danish-Norwegian king during the important 17th and 18th centuries.

In many cases those with rights of common (or a subgroup of them) came to be owners of the ground (as well as the remainder after the rights of common were accounted for). This seems to have come about in three ways:

1) through the recognition that long use of a part of the King's commons in other ways than what was implied by the rights of common, defined property rights to the ground for the users, or

2) through buying of a part of the King's commons, or

3) through buying the ground from the investors the King first sold it to.

If those buying the ground represented more than 50% of those with rights of common the unit have come to be known as "bygd commons". If they were fewer than 50% they were called "private commons". These "new" types of commons were first defined in acts from 1857 and 1863¹. The denotation "bygd commons", however, is older. Tank (1912) traces the expression to the middle of the 18th century.

The rest of the King's commons are today known as State commons.

Equally important have been the actions taken by the lawmaker to guard against the tragedy of the commons (Solnørdal 1958:43-46). During the 1720-30 we find concern about the conditions of the forests². A paragraph limiting the right of common to timber and fuel wood to the needs of the farm was inserted in the law of commons in Christian V's Norwegian Law of 1687. The reason then was probably more to extend the rights of the King to the resources in "his" commons and also to further the interests of the saw-mills, rather than to protect forest protection. But later it came to be enforced more strictly and seen as a tool for the regeneration of the forests. However, the principle of limiting some rights to the "needs" of the farm is older in the relation between a landlord and his tenant. In the Law of Frostating (from about 1160), the tennant is allowed to cut down threes for one ship of 12 oars, but no larger, without permission from the landlord (Frostatingslova XIII.4, p.190 in Hagland and Sandnes 1994). In Magnus Lagabøter's Law of the land (from 1274) the principle is repeated (VII.52, p.148 in Taranger 1915). In so far as the king viewed himself as the landlord for the commons, extending this principle could be defended. It was later extended to apply to pasture.

Later, mostly as a consequence of the King's sale of "his commons", new measures against the tragedy of the commons had to be introduced in the act on forestry from 1863. Both in the early 18th century and later in the middle of the 19th, the badly regulated access to timber in the commons and good timber markets evidently led to overuse. Limiting the right to take timber to the needs of the farm, made it illegal for the ordinary farmer to take timber for sale. After the King's sale of "his" commons, the new owners did not have to observe such rules for themselves and many did not have the resources to enforce them for the commoners (where rights of common to timber existed). A situation resembling the tragedy of the commons developed both in the commons and in privately owned forests. The first reaction

¹ .The act from 1857 on forest commons introducing a management system for forest commons other than state commons. In an act from 22. June 1863 on forestry, private commons were required to go through a land consolidation process dividing the forest area between the owners of the ground and the commoners. If an area was left with rights of common, it became a bygd commons. All private commons where the rights of common included rights to timber are believed to have been dissolved in this way. However, there exists private commons with rights of common to pasture, fishing and hunting of small game. One such, Meråker almenning, is discussed in NOU 1985:32,pp.36-38. Presumably there are more of them. How many is not known and the acts enacted since 1863 have to an increasing degree disregarded their existence, presuming their significance to be declining.

² See Acts of 20.August 1726, 7 October 1728, 8 December 1733, and 8 March 1740.

was to allow privatisation of state commons (Act of 5. August 1848¹) This was ended by the 1863 law on forestry. This law introduced public control of forestry activities for all forest land.

In order to define the variables going into the definition of the various commons we need more precise legal concepts. These we find in the history of land law in England. The problems of linking people to rights and duties of ownership, and of rights and duties of ownership to resources were apparently experienced also in England, and in some instances solved in similar ways to what happened in Norway.

Terminology based on English and American law²

Co-ownership

Property may be held by more than one person in several ways. Property rights may be DIVIDED among many persons. One person may own the timber, another person may own the fuel wood and a third person the pasture. Property rights may also be SHARED. The three persons owning timber, fuel wood and pasture may share the property rights to the ground and to hunting and fishing.

According to Lawson and Rudden (1982:82-84) English property law recognises two types of co-ownership: joint ownership and ownership in common. There are two important differences between them. One concerns what happens to the property on the death of one co-owner. **Joint ownership** implies that one joint owners interest accrues on his death to the other joint owners, while **ownership in common** implies that on the death of one co-owner his or her fractional interest passes to his successors³. The other important difference is that ownership in common implies a specified fraction of interest in the object. Yet each owner in common, "no matter how small his fractional interest, has the right to possess the entire parcel - unless all the co-owners agree otherwise by contract" (Singer 1993:801). Joint owners also has the right to possess the entire parcel⁴. But they are required to have equal fractional interest in the property⁵.

"Rights of common" and "Profits"

The distinction between ownership in common and joint ownership applies to co-ownership in general. To describe the forest commons in Norway and Sweden, we also need the concept of "Rights of Common". The "Rights of Common" is a variable bundle of rights called "profits" sharing the characteristic that they allow the holder to remove something of value from another owners property (originally "profits-à-prendre")⁶.

¹ The act annulled §38 in the act of 20. August 1821 which said " The forest commons owned by the state shall until further notice not be subject to sale or alienation". Selling the commons had obviously been debated. ² My sources are Singer 1993, Lawson and Rudden 1982 and Simpson 1986.

³ Today it is concluded that the joint ownership situation is ideal for the functioning of trusts and is said to apply to the management of property while ownership in common applies to the beneficial enjoyment of property (Lawson and Rudden 1982, p. 83-84).

⁴ The right to the entire property for owners in common is often defined by the phrase "the co-owners hold undivided shares". It is the physical object of ownership which is undivided.

⁵ For historical reasons the English terms are joint tenancy and tenancy in common if the object of interest is land. Here we will use ownership in common and joint ownership also if the object of interest is land.

⁶ The standard treatments of the law of property (Singer 1993, Lawson and Rudden 1982) do not discuss "Right of Common". Profits are defined as a type of easement by the law of servitudes (Lawson and Rudden 1982:129-130); Singer 1993:367). In discussing profits Lawson and Rudden (1982:130) divides them into two types, one type is seen as "survivals of old manorial customary arrangements, whereby the tenants of a manor had the right, for instance, to pasture their animals on the waste of the manor". This type of profit is linked to some tenement. The other type of profit exists "in gross", i.e. it belongs to a person. Rights of common is discussed by Simpson

Lawson and Rudden (1982,pp.127-35) defines a servitude as a relation between two units of land, the "servient tenement", which is burdened with a duty, and the "dominant tenement", for the benefit of which it exists. They list three types of servitudes: easements, profits-à-prendre, and restrictive covenants.

Simpson (1986:108-113) recognises three varieties of profits:

1) "profits appendant"¹ : the right to the resource is inalienably attached to some holding or farm unit², 2) "profits appurtenant": the right to the resource is attached to some holding, but alienable, 3) "profits in gross": the right to the resource belongs to some legal person in ordinary ownership (Simpson 1986:107-114).

Both Lawson and Rudden (1982:130) and Singer (1993:405) distinguish between profits appurtenant and profits in gross. Singer considers profits to be a subclass of easements in gross and states that profits today are considered freely alienable. Lawson and Rudden say that only profits in gross are freely alienable. Both finds that some rights can run with the land.

Simpson's three kinds of "profits" are defined by a combination of two different variables. One is a distinction between a person holding a right and a farm unit holding a right. The second is between the rights being alienable or inalienable. The point of these legal technicalities is obviously to let the right of common run with the farm as part of the total resources available. For many farms the viability would depend on these rights of common.

	Rights vest		
Rights vest in	inalienable	alienable	
land	appendant	appurtenant	
person	all men's rights	in gross	

TYPES OF PROFITS

This attachment of the rights of common to some kind of recognised farming unit is important also in another way. It allows a reasonable way of limiting the use of the resource. In Norway, for example, it is the needs of the farm, not the farmer, which defines the extent of the rights of common for pasture and wood resources. Thus one can say that even if it is the farmer who exercises the rights, it is the farm which "enjoys" it. This attachment of a right to a farm will be called "quasi-ownership" and the farms will be labelled "quasi-owners" to distinguish them from legal persons³.

(1986:107-108) but also he sees them as "essentially incidental to a system of agriculture which is no longer in use in most of the country, though in hill-farming country the right to pasture sheep on moor land commons remains essential to the type of farming practised." (Simpson 1986:261).

¹ Appendant profits was in England exclusively rights of pasture (Simpson 1986:111)

 2 If the holding was split up the appendant rights would also be subdivided (Simpson 1986:112).

³ See Berge and Sevatdal 1995 pp.266-268. One may say that the right to use some resource is quasi-owned if it is **inalienably** attached to legal persons in their capacities of being residents in an area or citizens of a state or to estates in their capacity as a cadastral units. An estate is not a legal person, but the right to use some particular resource can be inalienably attached to an estate and the use limited by the "needs" of the estate. The ability of estates to hold resources in quasi-ownership is the basis for calling them quasi-owners. The right to resources held in quasi-ownership may be annulled (extinguished), but not transferred independently of the estate. Selling the estate implies selling those particular rights as well. If the quasi-owner ceases to exist, the resource held in quasi-ownership will either also cease to exist or revert to the co-owners in case of joint quasi-ownership, not to any descendants of the estate. If two farm estates, both with rights to hunting in the commons, are joined, the new estate will not have the hunting rights of both the former farm estates, only the hunting rights of one quasiThe three types of "profits" does not contain any category where the right is inalienably attached to a person like citizen rights or human rights. However, the right to kill ground game is vested inalienably in the occupier of the land where the game is found, and the right to kill other game is usually vested in the freeholder (Lawson and Rudden 1982, p.74).

In Roman law usufruct was considered inseparably attached to the preson enjoying it (Lawson and Rudden 1982, p.163)¹. And in present day Norway and Sweden the "All men's rights" (Allemannsretten) in the outfields to such goods as right of way, camping, and picking of berries and mushrooms can be described as an inalienable personal profit. The all men's rights have no restrictions on who can enjoy them, but of course there are clear limits on how to enjoy them². Some other rights vest inalienably in persons as long as they are citizens of Norway, or are registered as living in a certain area or are members of a certain household. In the Norwegian bygd commons the right to fishing and hunting of small game will for example be an inalienable personal profit for all persons who are members of the households on the farms "quasi-owning" rights of common to hunt. In the state commons all persons who for the past year have been living permanently in Norway and who continue to do so hold inalienably the right to fish (except fishing of sea-trout and salmon) and hunting of small game without dog³. The clause "without dog" is interesting as an example of a limitation on harvesting technology. The local mountain councils managing the use of the state commons can allow hunting with dogs for all or reserve this for people from the bygd⁴.

owner.

¹ The same kind of property rights relation is today created by inalienable life interests as in protective trusts (England) or spendthrift trusts (USA) (Lawson and Rudden 1982 p.164).

 $^{^2}$ The principle of all men's rights as defined in Scandinavia is virtually unknown in the U.S.A. and England, but fairly common - although with variations - elsewhere in Europe (Steinsholt 1995). The struggle to keep and extend the rights of way tied to the system of footpaths and to establish a freedom to wander in England is vividly described by Marion Shoard (1987). In the USA public rights of access varies widely from region to region.

³Rules for hunting of small game with dog can be decided upon by the local government of the state commons, the "Mountain council", and can thus vary from one commons to the other. The Mountain council can also extend the right to fish to persons without permanent residence in Norway. See Act of 6 June 1976.

⁴They can also linit the number of hunters of small game but will then have to distribute the hunting permits fairly among people form outside and inside the bygd.

VARIABLE	CATEGORIES			
Type of commons unit	1) actor system			
	2) non-actor system			
Resources	1) ground and remainder			
	2) pasture, timber, fuel wood,			
	3) fishing and hunting of small game (except beaver)			
	4) hunting of big game			
Technology for harvesting	1) restriction			
	2) no restriction			
Rights of common	1) rights of common			
-	2) no rights of common			
Reindeer herding	1) rights of reindeer herding including rights of common to			
	wood, fishing and hunting			
	2) no rights of reindeer herding			
Co-ownership	1) joint, equal interest			
_	2) in common, fractional interest			
Owner units	1) legal person			
	2) cadastral unit			
	3) registered person (residence)			
Alienability	1) inalienable (appendant)			
	2) alienable (appurtenant)			
Quantity regulation ¹	1) internal			
	2) external			
Powers of local choice	1) defined in bylaws			
	2) not defined			
Economic activity	1) collective			
	2) individual			
Profits to commoners	1) in kind			
	2) in cash			
	3) in kind and in cash			
Duties to local society	1) no duties			
	2) maintenance of infrastructure			
Professional administration	1) required			
	2) not required			

Table 1 Variables used by the legal system to distinguish between property rights regimes

Forest Commons in Norway

Profits refers to rights to remove something of value from another owner's property. This means that somebody else owns the land burdened with rights of common. The somebody else would in England be the manors. In Scandinavia it used to be the King. Today the situation is more diverse here, but apparently simpler in England.

Bygde commons and State commons

Bygde commons and private commons are distinguished by how ownership to the ground is distributed among those with rights of common.

¹ The distinction between internal and external is more a matter of degree than of substance.

In state commons the company Statskog SF hold title to ground and remainder in trust for the state. The rules governing the rights of common in state commons are rather similar to those for bygd commons for timber and fuel wood, somewhat different for pasture, fishing and hunting, and departs significantly for the structure of governance. The use of timber and fuel wood in state commons is regulated in a separate act¹. If rights of common to timber and fuel wood exist in a state commons, the state government can decide that it shall be managed according to the law on bygd-commons for timber and fuel wood. The rest of the state commons are regulated by the act on mountains². An investigation of the situation in state commons without rights of common to timber remains to be done.

Today we can describe a bygd commons as a forest where the rights to the ground (and the remainder³) is **inalienably**⁴ "**quasi-owned**" **in common** by a majority of the farms with rights of common. Here two problems appear: Which are the farms with rights of common? And what are the rights of common? Which profits can those with rights of common take away? Again we have to turn to the law to see how the profits are defined and which characteristics they have been given.

The farms holding rights of common are said to be located in a "bygd" or "bygdelag". In the act "bygd" is defined as a geographical unit comprised of those farms which traditionally have used the area burdened with rights of common⁵.

Norwegian law distinguish 4 types of resources as profits. These are 1) rights of common to timber and fuel wood 2) rights of common to pasture for farms⁶, 3) rights of common to fishing and hunting, and 4) rights of common for reindeer herding. In addition we have to keep track of ownership to the ground with remainder.

Two of the rights of common, the rights of pasture and wood, are held **inalienably**⁷ in **joint quasi-ownership** by all farms located in the "bygd". The right of pasture include rights to put up necessary houses for utilising the pasture. For both the rights to pasture and to wood the needs of the farm will define the extent of use. If the commons cannot supply all the farms according to their needs there will be a proportional reduction in what they are entitled to.

The rights of common to hunt and fish are held **inalienably** in **joint ownership.** This means that the right is attached to the person owning the farm unit and his immediate family and household and will follow this person if e.g. the farm is leased to some tenant. There are different rules regulating hunting of big game and small game as well as access to fishing.

The right to reindeer herding is regulated in a separate act⁸. The rights entailed are held **alienably**¹ **in common** with **equal fractional interests** by all registered reindeer herders

¹Act of 19 June 1992 no 60.

²Act of 6 June 1975 no 31.

³The most important of the remainder is today hydroelectric power, leasing of ground for cabins, and - perhaps - landscape and nature conservation.

⁴But of course there are some exceptions such as sale for conversion to agricultural land and leasing of building lots.

⁵This way of delimiting the units with rights of common has been in the law since 1687. The practice though is older. The concept has been used in legal texts at least since Magnus Lagabøter's (1238-80) Landslov 1274. See also page 61-66 in Solnørdal (1958).

⁶In state commons farms with rights of common to pasture has the right to buy additional land suitable for tillage.

⁷Here there are no exceptions

⁸Act of 9 June 1978 no 49.

within a reindeer herding district. The rights of common to timber and fuel wood and to put up constructions can be described as being held in joint quasi-ownership by the reindeer herd. The extent of their use is limited by the needs of the herding.

The difference between the *joint quasi-ownership* of pasture and wood and the *joint ownership* of hunting is significant in relation to limiting the resource use. In quasi-ownership it is the needs of the farm which defines the upper limit within the total allowable removal. For hunting public authorities decide on necessity of regulations and limits the resource use by such techniques as limitation on time periods, type of technology and areas for hunting as well as quotas.

Resource specific regulations

In regulating the use of various resources it is obvious that the character of the various resources and the technology of utilising them combine to present unique problems for the regulator. General rules for resource management will not work well. The result is resource specific regimes of regulation.

Counting the ground and remainder as a separate resource we have to deal with 5 different legal regimes in the resource management of our commons. They are

- 1) ground and remainder,
- 2) pasture, timber, and fuel wood,
- 3) fishing and hunting of small game except beaver,
- 4) hunting of big game and beaver, and
- 5) pasture and wood for reindeer herding.

These regimes share the characteristic that the rights are inalienable and that there are powers of local choice defined in relation to their utilisation. They differ in type of co-ownership, which kinds of units are owners and how quantity regulations come about.

¹The right to reindeer herding is alienable in about the same sense as a Norwegian farm is alienable. In other words to buy you need concession from public authorities. But instead of the kin preference on the farm market, there is a requirement of ethnic and industrial attachment in the "market" for reindeer herding rights. Concession will be given only to Norwegian Saami who either themselves were active reindeer herders on or after 1.July 1979 or who have at least one parent or grandparent who were active reindeer herders on that date.

	ground and re-mainder	pasture, timber, and fuel wood	fishing and hunting of small game except beaver	hunting of big game and beaver	pasture and wood for reindeer herding
Rights of	no	yes	yes	yes	yes
common					
Co-owner-	in common	joint	joint	joint	joint
ship					
Owner units	cadastral unit	cadastral unit	registered persons	registered persons	reindeer herding unit registered in the local reindeer herding district
Use and	internal	internal	internal	external	internal
quantity	("owner	("needs of the	•	("publicly	("needs of
regulation	decision")	farm")	decision")	decided	the
				quotas")	industry")
Alien-ability	inalienable	inalienable	inalienable	inalienable	inalienable
Power of local choice	yes	yes	yes	yes	yes

Resource specific property rights regimes in Norwegian forest commons

Forest Commons in Sweden¹

The Swedish forest commons were created during the years 1861-1918, partly as a result of state interest in developing viable local communities and timber suppliers and partly as an answer to problems remaining from the land consolidation process which had been going on since the 17th century.

The only rights of common defined for them (as defined here) are the rights of the Saami villages to the pasture, wood, fishing and hunting of small game they traditionally have enjoyed as reindeer herders. For the rights of common there is a special regime for the right to hunt big game.

The rest of the resources of the forest commons are enjoyed as a consequence of being registered as an owner of one of the cadastral units to which ownership rights in the commons are attached. There are three different resource regimes governing their utilisation: 1) the ground and remainder, 2) fishing and hunting of small game and 3) hunting of big game. The most important of the remainder is timber and hydroelectric power. They generate fairly large incomes for the commons and are the basis of extensive and variable economic activities.

¹Sources for the information in Sweden are Carlsson 1995, and 1996, Act on "Häradsallmänningar av 18. April 1952", and Act on "Allmänningsskogar i Norrland och Dalarna av 18 April 1952"

The ground and remainder is **inalienably** owned **in common** by the cadastral units. The rights of fishing and hunting are held **inalienably** in **joint ownership** by all persons registered as owners of the cadastral units quasi-owning the commons.

	ground and remainder (includes timber, fuel wood, pasture)	fishing and hunting of small game	inting of game	
Rights of	no	no	no	yes
common				
Co-ownership	in common	joint	joint	joint
Quasi-owner	cadastral unit	registered	registered	Saami villages
units		persons	persons	
Use and	internal within	internal	external	internal
quantity	limits			
regulation				
Alienability	inalienable	inalienable	inalienable	inalienable
Power of local	yes	yes	yes	yes
choice				

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Resource si	pecific proper	tv rights r	egimes in	Swedish	forest commons
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Pasture have never been important in the forest commons. The right to use the few patches from which fodder could be collected ("ströängar") have never been resolved legally.

Thus for the Swedish forest commons there are four resource specific regimes:

- 1) ground and remainder
- 2) fishing and hunting of small game
- 3) hunting of big game
- 4) pasture, wood, fishing and hunting of small game for reindeer herding.

Concluding remarks

The legal definitions of the commons of Norway and Sweden have pointed to two differences which might be of interest in an investigation of their ecological sustainability and economic viability.

These differences exist 1) in the voting rights in the system of governance, and 2) in the extent of rights of common. In Sweden there are no significant rights of common for other people than the Saami. Further investigations should try to relate these differences to other differences such as differences in ownership rights.

It is also of interest to note that in Sweden a resource like pasture seems without importance. It seems unlikely that this can be true for earlier periods in their history.

The search for significant variables capturing the variation in various systems of common property uncovered several interesting distinctions. The most important may be the recognition of resource specific systems of rights and duties to some extent cutting across the social categories distributing the benefits from the resources. In this connection it is important to note the technique of inalienably linking rights of common to the farm, "profits appendant" also in terms of "needs" in order to limit the resource use.

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APPENDIX TABLE 1 PROPERTY RIGHTS REGIMES IN FOREST COMMONS

ITEMS	SWEDEN	NORWAY						
REGIME TYPE	skogsallmänning	bygde allmenning	stats-allmenning administrert som bygdeallmenning for virkesretten					
	FOREST COMMONS	BYGD COMMONS	STATE COMMONS organised as bygd commons for rights to wood					
other names used		parish commons ¹						
Geographical areas linking forest commons and cadastral units	"socken" (parish) and Saami villages	"bygd" and reindeer herding districts	"bygd" and reindeer herding districts					
No of units	33	51	8					
Type of unit	actor	actor	actor					

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¹ Used by Sevatdal, Hans 1995, Rygg and Sevatdal 1995

PROPERTY RIGHTS REGIMES IN FOREST COMMONS								
ITEMS	SWEDEN	NORWAY						
REGIME TYPE	skogsallmänning	bygde-allmenning	stats-allmenning administrert som bygde-allmenning for virkesretten					
distributional variab	les							
owners of ground and remainder			title to the ground and remainder is held by the state					
"quasi"-owners of ground and remainder	legitimate agricultural or forest units at the time of creation of the commons or units descended from those	title to the ground and remainder is held by a group of farms with rights of common						
co-ownership of ground	in common	in common	by STATSKOG SF in trust					
alienability of ground	inalienable from quasi-owner	inalienable from quasi-owner	inalienable with exceptions					
commoners	*inhabitants of Saami settlements	 rights of common are held by all legitimate farms in the "bygd", reindeer herding unit registered in the local reindeer herding district 	 rights of common are held by all legitimate farms in the "bygd", reindeer herding unit registered in the local reindeer herding district 					
co-ownership of rights of common	joint	joint	joint					
alienability of rights of common	inalienable from commoner	inalienable from commoner	inalienable from commoner					
resource systems where rights of common are defined	there are specific rules governing * pasture and wood used in conjunction with reindeer herding	there are specific rules governing *buildings, *pasture, *timber, *fuel wood, *hunting of small game, *fishing * pasture and wood used in conjunction with reindeer herding	there are specific rules governing *timber, *fuel wood * pasture and wood used in conjunction with reindeer herding					

APPENDIX TABLE 1 (continued) PROPERTY RIGHTS REGIMES IN FOREST COMMONS

PROPERTY RIGHTS REGIMES IN FOREST COMMONS							
ITEMS	SWEDEN	NORWAY					
REGIME TYPE	skogsallmänning	bygde-allmenning	stats-allmenning administrert som bygde-allmenning for virkesretten				
	anisational variables		·				
responsible actor	board elected by owners of farm units "quasi-owning" the commons	board elected by commoners	 a board elected by commoners "allmenningsstyret" ¹ and the local chapter of Statskog SF co- manage the wood resource 				
voting rights	according to fraction of interest	2 votes for each quasi-owner of rights of common	2 votes for each quasi-owner of rights of common to wood				
professional administration	required	required	required				
change of area	some restrictions	severe restrictions	severe restrictions				
common economic activity	variable	variable	variable				
profits for owners	variable	variable	possible				
duties of board	represent the owners, management of resources, economic activity, support the activities of the owners and the improvement of the local community	represent both owners and commoners, management of resources, support the improvement of the local community	 represent the commoners, co-management of funds designed to cover road maintenance, forest rejuvenation, etc., represent the interest of the owner of the ground, regulation of timber felling 				

APPENDIX TABLE 1 (continued) PROPERTY RIGHTS REGIMES IN FOREST COMMONS

¹ A board elected by the municipality ("fjellstyret") manages resources other than wood

PRIVATE COMMONS AS A PROPERTY RIGHTS REGIME					
ITEMS	NORWAY				
REGIME TYPE	privat-allmenning PRIVATE COMMONS				
other names used					
Geographical area linking commons and cadastral units	"bygd"				
No of units	1 - possibly more ¹				
Type of unit	non-actor				
distributional variables					
owners of ground and remainder	legal persons without rights of common, and/ or				
"quasi"-owners of ground and remainder	a group of farms consisting of fewer than 50% of those with rights of common				
co-ownership of ground	in common				
alienability of ground	alienable				
commoners	 * rights of common are held by all legitimate farms in the "bygd", * reindeer herding unit registered in the local reindeer herding district 				
co-ownership of rights of common	joint				
alienability of rights of common	inalienable from commoner				
resource systems where rights of common are defined	there may be specific rules governing some or all of *buildings, *pasture, *timber, *fuel wood, *hunting of small game,				
	*fishing * pasture and wood used in conjunction with reindeer herding				

APPENDIX TABLE 2 PRIVATE COMMONS AS A PROPERTY RIGHTS REGIME

APPENDIX TABLE 3

Resource specific property rights regimes in Norwegian state commons

-	ground and re- mainder	housing (seter) and tillage	pasture	timber and fuel wood	fishing	hunting of small game	hunting of big game, beaver and lynx	pasture and wood for reindeer herding
Rights of common		yes	yes	yes	yes	yes	yes	yes
Co-owner-ship		in common	joint	joint	joint	joint	joint	joint
Owner units	state	cadastral unit	cadastral unit	cadastral unit	persons	persons	persons	reindeer herding unit
Alien-ability	no, with excep- tions	yes, on condition	no	no	no	no	no	no
Geographic definition of rights holder		bygd	bygd	bygd	living in Norway	living in Norway	living in Norway	reindeer herding district
Time limits		no	no	no	no	yes	yes	no
Quantity regulation		yes	yes («farm» needs)	yes («farm» needs)	no	yes	yes	yes (needs of herding)
User fee		no	no	yes	yes	yes	yes	no

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Resource spec	_	v 0	0	0				
	ground and re- mainder	housing (seter) and tillage	pasture	timber and fuel wood	fishing	hunting of small game	hunting of big game, beaver and lynx	pasture and wood for reindeer herding
Rules for termination of rights		yes	yes	yes	no	no	no	yes
Possible to lease to outsiders		yes	yes	no	yes	yes	no	no
Power of local choice		yes	yes	yes	yes	yes	yes	yes
Restrictions on technology		no	no	no	yes	yes	yes	no
Further differentia-tion within group		-housing -tillage			- salmon and sea trout, -other fish		-elk -deer -reindeer -roedeer, bever and lynx	

APPENDIX TABLE 3 (continued)

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