

A Series of Wood Carvings
On the
**The History of the Iceland Soil
Conservation Service**
For their new lecture theatre at Gunnarsholt



The Wood Carvings were presented to The Soil Conservation Service as gift from Alexander, Geraldine and Stirling Robertson as a contribution to their centennial celebrations.



Landgræðsla, í 100 ár
Ársskipti, 2007



Landgræðsla ríkisins



1907 - 2007
Landgræðsla í 100 ár

Listamaðurinn:

Íslandvinurinn og skógfræðingurinn Dr. **Alexander Robertson**, St. John á Nýfundnalandi, skar þessi einstæðu listaverk út og færði Landgræðslunni að gjöf í tilefni af 100 ára afmæli landgræðslu á Íslandi.

Myndirnar eru skornar í túlipanvið (*magnoliaceae liriðendron tulipifera*) sem vex í suðausturhluta Bandaríkjanna.

Dr. Alexander, oftast kallaður Sandy, hefur átt mikið og farsælt samstarf við Landgræðsluna og Skógræktina frá árinu 1970.

Mynd 1



höndum Alþingis, en framkvæmd dóma í höndum þess sem brotið hafði verið á eða hans goða.

Myndin sýnir mannlíf við íslenskan torfbæ, víðarhögg, járnsmíði, leður- og ullarvinnu, heyskap, eldamennsku, hið eilífa verk að sækja vatn, ritun handrita og börn að leik.

Mynd 2



Mynd 2

Fyrstu lögín um varnir gegn uppblæstri lands 22. nóvember 1907

Í Íslandssögunni skiptust á skín og skúrir í búsetu og gróðurfari landsins. Breytingar á veðurfari, landeyðing og mannfali vegna eldgosa, hungursneyða og farsóttá hélt fjölda landsmanna við um 50.000 um aldir. Um langan tíma hrakaði landbúnaði. Veðurfar fór kólnandi eftir um 1050 og var ástandið verst á "Litlu ísöldinni" milli 1450 og 1900. Kaldir hafstraumar báru hafis að Íslandsströndum, skógareyðing og ofnýting lands öllu gróðurskemmdum og endurteknum hungursneyðum. Fólkið reyndi að aðlaga sig verrri kosti og erfiðari lífskilyrðum með meiri vinnu. Hnignun landgæða kom í veg fyrir akuryrkju.

Mynd 3



Myndin sýnir uppblástur og eyðimerkurmyndun við Gunnarsholt 1907 en 75 býli

í sveitarfélaginu fóru í eyði á s.l. öldum. Gunnlaugur Kristmundsson fyrsti sandgræðslustjóri (1907-1946) er sýndur á baki hesti sínum Gregg nálægt rofabarði, hæð barðsins var í raun tvöföld hæð hests og manns. Dauða tréð er táknrænt fyrir eyðingu skóganna.

Mynd 1

Landnáms- og þjóðveldisöld 874-1262

Eyja viði vaxin milli fjalls og fjöru, gjöful á fisk, sel og fugl gat ekki lengi verið óbyggð.

Víkingar námu land á Íslandi árið 874, þeir voru bændur og fiskimenn og landnáði var lykkillinn að farsælu fjölskyldulífi. Búsetumynstrið var stök býli fremur en myndun þorpa. Daglegt líf snerist um búskap, kindur, kýr, svin og geitur. Einhver akuryrkja var stunduð en uppskeran að mestu ætluð til fódurs og bruggunar. Víkingarnir voru hágr í tré og járn, mikilvægt var að vera sjálfum sér nógur í sátt við landið. Vöruskipti og verslun voru þó gjarnan granna á milli.

Búseta manna og búfé tók síðan að hafa viðtæk áhrif á gróðurfar.

Samfélagið sem Íslendingar mynduðu var lýðveldi án framkvæmdavalds eða sérstaks þjóðhöfðingja. Lögjafar- og dómvald var í

Mynd 3

1907-1946

Gunnlaugur Kristmundsson sandgræðslustjóri hóf störf þegar sandfokið ógnaði stórum byggðalögum. Skógum var eytt og sumstaðar voru bæjarstæði sífellt flutt undan eyðingaröflunum. Byggðir urðu að örfoka landi.

Vinnutæki bænda voru fábrotin hand- og hestaverkfæri til jarðvinnslu og heyskapa. Vélknúin tæki voru engin. Landbúnaður var aðalatvinnugrein landsmanna og verkmenning lítt frábrugðin því sem tíðkast hafði á fyrstu öldum byggðar í landinu.



Mynd 4



tilbúinn áburður til landgræðslu og hafin skipulagning landnýtingar og beitarstjórnun til að ná árangri í skefjalausri gróðureyðingunni.

Runólfur byggði upp glæsilegan búrekstur í Gunnarsholti með sauðfé og Galloway nautgripum. Það voru skýr skilaboð um efnahagslegt gildi uppgræðslu og að rækta mætti sandana til búskapar. Með þessu gaf Sandgræðslan bændum von um árangur og hvatningu til landbóta.

Mynd 5



Mynd 5
1954-1972

Páll Sveinsson var sandgræðslustjóri 1954-1972.

Ný tækni var kynnt til sögunnar, áburðardreifing með flugvél árið 1958. Áburðardreifingin olli straumhvörfum í starfinu, nú var unnt að græða upp stór gróðurvana landsvæði á skömmum tíma.

Mynd 6



Ný lög voru sett um landgræðslu árið 1965. Til viðbótar fyrri verkefnum bættust þá við gróðurvernd og gróðureftirlit og stofnunin nefnd Landgræðsla ríkisins. Á myndinni sést einnig verndun lands gegn ágangi fallvatna.

Algjör vantrú almennings var á að nokkuð mannlegt afl gæti stöðvað eyðingaröflin. Einstöku framsýnir og dugmiklir bændur gerðu að visu tilraunir á jörðum sínum en árangurinn var lítill og staðfesti þá trú við ofurefli væri að etja.

Helstu uppgræðsluáðferðir voru friðun lands gegn búfjárbeit, bygging garða úr grjóti eða timbri til að stöðva sandfok og sáning melgresis meðfram þeim. Þrátt fyrir erfiðleika og mikla varnarbaráttu, skilaði vinnusemi og eldmóður Gunnlaugs árangri í verki. Bygðum var bjargað frá gróðurskemmdum og jafnvel algjörri eyðileggingu; Skeiðin ofanverð, Landsveit, Rangárvellir, Landeyjar, Vík í Mýrdal, Álftaver og Meðalland.

Mynd 4
1947-1954

Runólfur Sveinsson var sandgræðslustjóri 1947-1954. Nú var vélvæðing að hefjast. Fjárframlög til landgræðslu jukust töluvert og gerðu kleyft að takast á við fleiri verkefni. Byggt var á fyrri reyngslu, að vinna með náttúrunni. Fyrri sandgræðslusvæðum var haldið við og vinna hafin á nýjum.

Vélar og tæki voru reynd og tekin í notkun í þágu sandgræðslu og tilraunir gerðar með nýjar plöntutegundir sem fluttar voru inn einkum frá Bandaríkjunum, Kanada og Skandinavíu. Fluttur var inn

Mynd 6
1972-

Sveinn Runólfsson varð landgræðslustjóri árið 1972. Landgræðslan óx næstu áratuginu í takt við samfélagslegar breytingar og viðhorf í umhverfismálum. Nú er stofnunin nútíma þekkingar- og þjónustustofnun með líðlega 60 ársverk fólks sem vinnur að landgræðslu og gróðurvernd.

Árið 1988 var stofnsett fræverkunarstöð sem sér um frævinnuferlið, allt frá sáningu til uppskeru, vinnslu, pökkunar og flutnings. Þetta gerði kleyft að nýta innlendar tegundir til uppgræðslu sem hæfa betur aðstæðum en innfluttar tegundir. Landgræðslufélög voru stofnuð og landgræðsluverðlaun veitt þeim sem skara fram úr. Stærsta verkefnið er „Bændur græða landið“.

Á síðustu árum hefur starf Landgræðslu ríkisins æ meira beinst að ráðgjöf, fræðslu og að vera leiðandi fyrir alla sem huga að landi. Eigin framkvæmdir hafa minnkað en verktakar og bændur tekið við mörgum verkefnum. Áherslan hefur færst frá beinum aðgerðum yfir til ráðgjafar, rannsóknar og þróunarstarfs, öflun landupplýsinga og skipulags landnýtingar.

„Græðum Ísland“



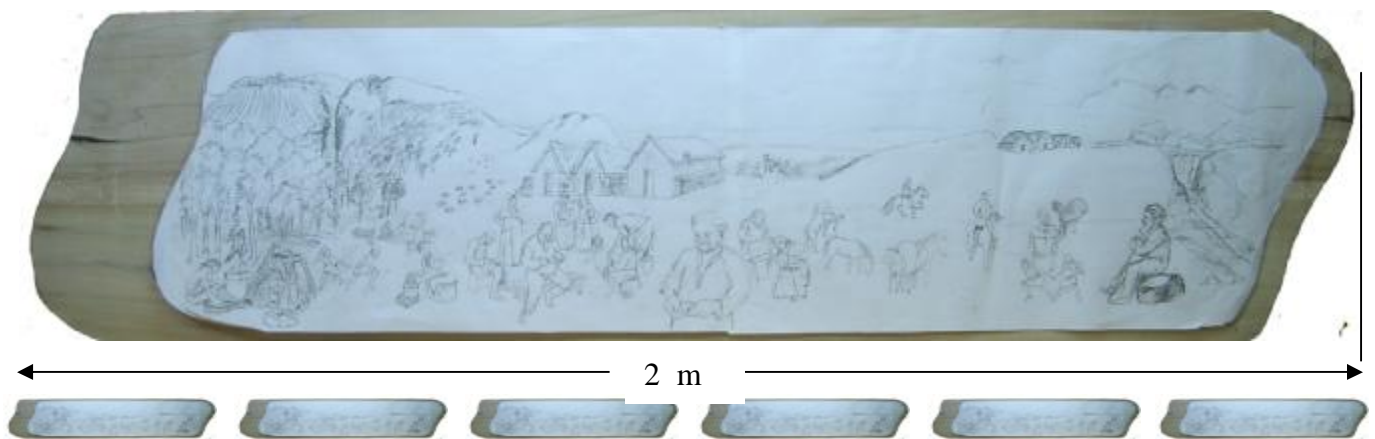
1907 - 2007



Wood Carvers Notes on the Series Celebrating the Centennial of Landgræðsla 1907 - 2007

A rough guide to how the panels are to be laid out.

A, each panel is to be trimmed to 1.97 m x 0.53 m. The panels will have a carved end on such a way they appear to lean naturally towards the future. On the left side of each panel is a 20 cm x 53 cm space for historical notes. Historical notes will be printed onto clear plastic and stuck onto thin (< 0.5 cm thick) birch plaque carved to look like a well worn parchment which will be glued to the board.



THE WOOD

Tulip poplar (*magnoliaceae liriodendron tulipifera*) - more widely known as yellow poplar – was chosen because it usually has a very pleasant variation of colours ranging from the white of its sapwood, the tan of its heartwood and most and streaks of greenish brown, dark green, purple, black, blue and yellow. With careful consideration and a bit of luck the colour variations can be used to good effect for subtle tones were used to good effect for most of the landscape scenes. For the most part the wood carves well.

However, at extremely fine scales, the grain tends to fragment and does not give that sharpness or perfection of detail that one gets with other woods like cherry, oak and walnut. Nevertheless, on the plus side from this carvers point of view, the multicolour and slight imperfections of the grain of tulip poplar is best suited to slightly impressionistic style – which I think has more character than the somewhat plastic look of perfectly sanded contours most carvers aim for.

Sveinn and I had many email discussions as to what should be featured in each panel. And while we accommodated most of what we wanted, the colour variations in the grain largely determined the final outcome. In other words I played the grain, as they say, by controlling the depth along the boundary between the heartwood (tan) and sapwood (white): laterally in the case of panel 2; and vertically to highlight rofarbarðs on eroded mountains in panel 5.



Panel 1

This section represents the age when the sagas were written - a time when, coastal Iceland was still well-forested; including Rangárvallasýsla according to Burnt Njal's saga as well as archaeological and biophysical evidence.

A early farm scene with a wood cutter, a bloomery and forge, a wood turner, leather crafts, sheep shearing, cook, hay making, water woman, children playing tag, and sheep stripping the vegetation off the hinterland and of course the classic Iceland turf farmhouses - all of it watched over by the elderly patriarch on his Dais stone.

In early the Icelandic culture, as it still is, the two most important people on the farm were the farmer-scholar (centre) who spent much of the summer on the long journeys to the Alþing and markets and perhaps a squabble or two with rival factions; while his wife – the proud lady on the left side of the farm – is effectively the boss of the farm.

Then, as now, there were many horses; some for working the farm, others for transporting produce, and quite a few purely for ornamentation and perhaps as a status symbol.

Ancient forests of birch, rowan, willow and aspen (now scarce) and an extremely rich flora covered most of the plains and mountain slopes up to 600 m.

Everywhere there are many waterfalls both great and sma', and a most remarkable geodiversity – such as the high basaltic columns that I have carved on the left.





1907 - 2007

Panel 2

This panel represents the awful circumstances of desertification around Gunnarsholt in 1907.

It is not hard to imagine how Gunnlaugur Kristmundsson the first director of the Soil Conservation Service felt as he and his horse was dwarf by the last remnants of rofarbarð¹. The scale of the rofarbarð to the rider, is no poetic licence on my part; it was from a scene in an old film with a clip of Gunnlaugur riding his horse by a rofarbarð

The contrast between heartwood and sapwood is fortuitous in the sense that, on a clear day, Iceland deserts do look a lot darker in the foreground and much brighter in the distance.

The dead tree is symbolic of a woodland that once covered 25% of Iceland and which largely disappeared after medieval age.

I have chosen to illustrate an abandoned Danish style concrete farm generally built in exposed locations in defiance of the elements – how drafty they must have been.

Barely visible and tucked sensibly in sheltered locations, is a abandoned traditional turf roof farm – of which there are many ruins throughout the district. Þríhyrningur is one of two signature mountains within site of Gunnarsholt – the other is Hekla. It is such an interesting mountain to carve that I made it larger than the scale it is seen from Gunnarsholt. So please excuse my artistic licence.

By the time Landgræðsla arrived at Gunnarsholt at least 18 farms that were abandoned and many more that were abandoned since the arrival of Landgræðsla





1907 - 2007

Panel 3

As one well trained in honest workmanship, it is with great pleasure to carve this tribute to the workers who undertook the back-breaking and rough work of building walls of lava rock and in some cases wood to stop sand drifting just enough to allow vegetation to be established.

This was a period prior to mechanization when horses were *modus operandi* for transporting material and ploughing which lasted well into the 1950's

For good measure I have added a sandstorm brewing in the interior beyond the mountains on the horizon – a fairly common occurrence.

Looking closely, one can see grass seed being broadcast into the furrows. The plough is an antique Scot's (Scotch) walking plough, which, as in Iceland, is still used in Scotland by some crofters. So, in carving the horse that pulls the plough, I had in mind a cross between the shaggy-main Icelandic and the muscle-bound Clydesdale horse as an oblique reference to the ancient genetic links between the peoples of Iceland and Scotland...

On the horizon is the active volcano Hekla - the other signature mountain seen from Gunnarsholt.





1907 - 2007

Panel 4

There were a couple of decades when mechanization and horse power overlapped.

On the right is Runólf Sveinnsson, who succeeded Gunnslaugur as Director of Landgræðsla and he was chiefly responsible for introducing mechanization such as the 1951 International –McCormick W4, which has been restored to a pristine condition.

On the left are sheep and the devastated vegetation they are responsible for. When sheep are excluded from fenced areas, vegetation miraculously reappears within a few years. In this case, I have chosen to emphasise how excluding sheep allows for restoration of productive grassland that can carry a herd of prize milkers and also crops of potatoes and barley that Runólf had long been demonstrating was possible.

While carving knots unexpected appeared which, fortunately, were strategically located on the skyline and hence were used to good effect as the summit of Hekla and a couple of other volcanoes. In another tiny knot in the grasslands I used as fox in its lair in honour of our dear friend the legendary fox hunter of Gunnarsholt. Perhaps this is one fox that escapes his attention!





Panel 5

Runólf was succeeded by his brother Páll (centre). Páll is best known for introducing aircraft for aerial seeding and fertilization of large tracts of land. He is also remembered for preservation of river banks and large-scale introduction of special strains of barley suitable for Iceland.

The Douglas DC 3 is a famous plane in Iceland having started out as a cargo plane, an Icelandair passenger plane in the 1960's before it was acquired by Landgræðsla as an 'air tractor'. The DC3 is appropriately named Páll Sveinsson and has a peculiar fertilizer call letters. **TF-NPK** (Nitrogen **P**hosphorus, **P**otassium).

For the white material being 'spread' by the modern air tractor used by Landgræðsla is real fertilizer which I ground from a small rock of limestone I have in the garden (which with another one, looks like a hen's eggs in a nest).

The rofarbaðs were a bit of a challenge initially since most of the surface is sapwood. However, with luck, the heartwood began to reveal itself as I began to carve deeper along the skyline. And so by carefully controlling the depth between the skin-deep layer between sapwood and heartwood, I was able to simulate the contrast between 1 grassland of rofarbaðs (sapwood) and the darker, plantless erosion (heartwood)

Between the rofarbarðs on the right side I added speckles of dust ground from a small piece lava that Skógæktarfélag gave us as a memento of the trip to Newfoundland. Perhaps it looks, but the connection was irresistible. The touch of red above the 'Gunnarsholt sand' is **African padauk** (*Pterocarpus soyauxii*) which over time will change to a warm brown





Panel 6

To round off a century of Landgræðsla, Sveinn Runólfsson succeeded his uncle as the current director.

His tenure is in an age where environmental issues are front and centre in the political agenda. Quite apart from administering and transforming Landgræðsla into an advanced technological agency dedicated to land reclamation, Sveinn's other great strength lies in articulating the need for strong support for land reclamation in this modern age of highly-charged political, social and environmental activism. For this reason I have depicted Sveinn lecturing to a small cross-section of Icelandic society,

The faces represent all ages from the little girl raising her hand to interrupt Sveinn with a question, an inattentive boy (boys generally have a shorter attention span than girls!), a couple of students, office worker, biologist, a politician, an old farmer, a retired school teacher (sitting on the grass) and a great grand father (the one with glasses next to Sveinn).

The key point of this panel is that it is the transformation of the devastated landscape panel 2 that has been bountifully restored by a century of Landgræðsla. The Gunnarsholt complex has grown from a few modest buildings on a desert in 1907 to the vibrant and well-heeled complex set in among trees and prosperous farmland that it is today.

In the distance one sees the Westman Islands and to the right Surtsey and Þríhyrningur to the left. I have also carved some of the 80 km of hedges stretching to distance.

On the far right are migrating swans stopping over to feed on the abundant grasslands. The point of the swans is that, whatever Landgræðsla does on the plains and hinterlands, positively affects wildlife in many southern countries. And without grasslands, we would not enjoy the company of the famous Iceland horse.



