

Arkeologisk forskningsundersökning Gudings slott, Eke socken, Gotland, år 2021

Dnr 431-1662-2021

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Omslagsbild: *Undersökning av den vikingatida skelettgraven inom vallanläggningen Gudings slott..*

Foto: *Dan Carlsson*

Förord

Ett projekt av den dignitet som vi nu har bedrivit i Eke, där vi nu är inne på fjärde året, och som var planerat att bli det sista, är definitivt inte ett projekt som man driver utan stora insatser från många och det finns all anledning här att lyfta fram de insatser som gjorts av många för att projektet har kunnat komma till och kommit så långt i utforskandet av Ekekusten och dess intressanta historia

Dessa fältkurser i arkeologi genomförs sedan 1998 i samarbete med Folkhögskolan i Hemse, som håller i alla de praktiska saker om skall skötas med boende, mat, registreringar, transporter etc etc, Ett arrangemang som har fungerat utmärkt och där vi vill rikta ett innerligt tack till [personalen på folkan](#) för utmärkt genomförda arrangemang. Här bör också nämnas min kollega på Arendus, arkeolog [Christian Hoffman](#), och arkeolog och osteolog [Petter Åkeson](#), som tog hand om Prövpågången vecka 28.

Kursen detta andra år av pandemin genomfördes enbart i form av den traditionella svenska kursen, någon internationell kurs i likhet med tidigare år, bortsett från förra året, kom inte heller detta år att genomföras mot bakgrund av covid-19 pandemin. Detta till trots var det ändå två från utlandet som valde att följa våra ordinarie kurser. Därtill medverkade också två studenter från Uppsala universitet och en student från universitet i Bologna i Italien som en del i deras utbildning på masternivå och praktik.

I år kom kursen att vara på 5 veckor, mot tidigare 4 veckor, och med de lättnade i restriktioner med tanke på pandemin och en uppdämd önskan om att gräva gjorde i princip att kurserna kom att bli fullteknade. Vi kom att bli mellan 22 och 26 deltagare per vecka under de fem veckor fältarbetet pågick och vi fick spännande, konstiga och förvånande resultat!. Alla ni som deltog är alla värda ett stort tack, ni har på ett avgörande sätt fört forskningen om Gotland framåt; [Maria Andersson](#), [Albin Aronsson](#), [Alice Rosa Brusin](#), [Mikke Brännström](#), [Konrad Lundberg](#), [Katarina Nordqvist](#), [Mona Windh](#), [Anna Sointula](#), [Cherie Jeanette Larkin](#), [Samantha Rach Nimmo](#), [Jana Ivovic](#), [Josefin Hultmar](#), [Stefan Eliasson](#), [Angela Jaconelli Lind](#), [Monica Hjelm](#), [Anette Augustsson](#), [Axl Fredriksson Wahlund](#), [Anita Lifvendahl](#), [Leif Kindahl](#), [Ann-Sofie Eriksson](#), [Anette Svensson](#), [Sarah Ljessnoi](#), [Sture Carlson](#), [Ewa Thelén](#), [Lena Hansson](#), [Catharina Stierngranat Folke](#), [Stefan Nord](#), [Kristina Into-Malmberg](#), [Mats Millberg](#), [Jesper Rönholm](#), [Carina Dircks](#), [Rolf Andersson](#), [Magnus Hedlund](#), [Åsa Hedlund](#), [Jan Zidén](#), [Leif Jansson](#), [Helene Malmberg](#), [Lars Eklund](#), [Gunilla Hedbrant](#), [Mats Karlsson](#), [Ulla Nordström](#), [Carin Runqvist](#), [Mats Tivenius](#), [Johnny Wallin](#), [Erik Wasell](#), och [Birgitta Ågren](#).

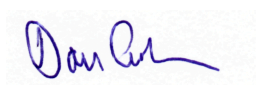
Men för att ett projekt av den här digniteten skall fungera är det en hel del runt omkring som också måste fungera. Inte minst gäller det att det finns positiva markägare, och det vill jag tydligt understryka att utan all den hjälp vi fått från markägarna [Mats Hallvede](#) och [Kerstin Hildingsson](#) vid Gudings i Eke, [Roger Lundberg](#) vid Ronnings i Grötlingbo och [Henrik Lagerin](#) i Rone, hade det aldrig gått att genomföra utgrävningen. Vi är er ett innerligt stort tack skyldiga för att ha bistått oss under dessa år med allt från att grusa väg, till att röja marken och till att hjälpa oss att hägna in våra grävplatser.

En arkeologisk utgrävning är dock inte slut bara för att fältkursen är slut, det vidtar ett ofta omfattande och tidsödande arbete att översätta sommarens resultat till något som kan läsas av alla. I detta ligger även många gånger omfattande analysarbeten, inte minst att låta göra åldersbestämningar av människor eller stolpar eller andra lämningar och verktyget heter då främst ^{14}C analyser, då fynden är förhållandevis få.

Under den tid som projektet pågått har det visat sig vara av ovärderlig hjälp att kunna nyttja ^{14}C i arbetet med att tolka historien, inte minst mot bakgrund av att föremål inte alltid påträffats som kan ge en antydning om ålder. Med ett mycket generöst bidrag från [DBW:S Stiftelse](#) kommer vi nu kunna genomföra en analys

av 3 prover detta år. Ett stort tack för bidraget som tocklöst är en förutsättning för analysen av historien i Eke. Vi har även haft en ansökan hos [Berit Wallenbergs stiftelse](#) för att komplettera med ytterligare 7 stycken ¹⁴C prover, som på ett utmärkt sätt skulle komplettera tidigare beslutade analysprover. Tyvärr fick vi inget stöd från stiftelsen, varvid [Arendus AB](#) har gått in och sponsrat med kompletterande 7 prover. Sammanställningen av de undersökta lämningarna har gjorts av [Alice Rosa Brusin](#), [Cherie Jeanette Larkin](#) och [Anna Sointula](#).

Det bör ha framgått av det ovan sagda, att det är en synnerligen omfattande verksamhet att bedriva fältkurser i arkeologi som vi ju gjort i en följd av år, och jag må ha idéer om vad vi borde beforska, men utan all er medverkan, stöd och support, hade jag fått nöja mig med blotta tanken att försöka lösa gåtan med kustens lämningar. Ni skall veta att ni under alla dessa år vi har bedrivit dessa kurser på ett mycket avgörande sätt har fört kunskapen om den gotländska historien framåt!



Doc. Dan Carlsson
Projektledare

The Connecting Point 2021

Arkeologisk forskningsundersökning, Eke, Grötlingbo och Rone socken, Gotland

Typ av undersökning: Arkeologisk undersökning

Undersökande institution: Arendus AB

Socken: Eke, Grötlingbo och Rone

Län: Gotland

Rapport: Dan Carlsson, Alice Brusin, Anna Sointula och Cherie Larkin

Introduktion

Rapporten sammanfattar det fjärde årets arkeologiska undersökningar inom projektet *"The Connecting Point"*, i form av en kortfattad redogörelse för resultaten från en kompletterande undersökning av fornlämningsmiljön vid vallanläggningen Gudings slott. Slutsatserna från årets grävningar är att se som preliminära, då en slutlig skrift kommer att sammanställas efter avslutade fältundersökningar inom ramen för projektet.

Undersökningarna under projektets fjärde år har framför allt handlat om att fördjupa kunskapen om historien kring vallanläggningen Gudings slott och då framför allt frågan om datering och tolkning av de lämningar som har påträffats söder om själva vallanläggningen, lämningar som tills förra året inte var kända. Området utgjorde tidigare synnerligen tät, igenväxt och slyig ungskog, men genom de omfattande röjningar som genomförts av markägarna Mats Hallvede och Kerstin Hildingsson har ett helt nytt landskap framträtt

Längs en ås som sträcker sig från vallanläggningen mot söder har kunnat registrerats ett 15-tal skilda lämningar i form av såväl möjliga gravar som husgrunder och mer oregelbundna och oklara stenhögar, sammanförda i ett område som betecknas som boplatz- och gravområde (L2021:1494). Tyngdpunkten i sommarens utgrävningar har berört detta område. Kompletterande undersökningar har skett inom själva vallanläggningen i form av en förmodad husgrund i norra delen av Gudings slott (L2021:1495) och därtill två av gravarna i det södra gravfältet inom vallanläggningen (L1977:4153). Ytterligare en anläggning (L2021:1493), belägen ca 300 meter sydväst om Gudings slott och på en tydlig grusås som löpet genom landskapet från sydväst mot nordöst, undersöktes en anläggning för att följa upp om omkringliggande enskilda lämningar.

En väsentlig inriktning under sommarens utgrävningar har varit att även påbörja en jämförande studie i kringliggande socknar (Rone och Grötlingbo) för att få ett grepp om situationen i Eke kan ses som specifik eller som en del i en generell bild av förhållandena längs den gotländska kusten under loppet av järnåldern. I detta syfte kom en grav att undersökas i Grötlingbo socken (L1976:750) och en husgrund av samma karaktär som i Eke, i Rone socken (L1975:1157).

Rapporten är huvudsakligen författad på svenska, men där anläggningsbeskrivningarna är på engelska, både för att medförfattarna inte fullödigt behärskar svenska och för att vi vill nå ut med resultaten till en bredare, internationell publik.

.....

Dan Carlsson

Projektansvarig



Figur 1. Kartutsnitt över del av Gotland som visar undersökningsområdet översiktligt, beläget längs kusten av sydöstra Gotland. Källa © Lantmäteriet.

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Berörda fornlämningar i Eke, Grötlingbo och Rone socknar och deras nummer i det nya systemet för riksantikvarieämbetets numrering av lämningar som utgör en löpnummerserie för hela landet.

- L1977:4153). Gravfält (Eke socken)
- L2021:1493. Grav (Eke socken)
- L2021:1494 Grav- och boplatssområde (Eke socken)
- L2021:1495. Husgrund (Eke socken)
- L2021:1504. Grav (Eke socken)
- L1976:750. Grav (Grötlingbo socken)
- L1975:1157. Husgrund (Rone socken)

Inledning

Projektet *The Connecting Point*

För att belysa den kustnära aktiviteten under vikingatid på Gotland påbörjades under sommaren 2018 och inom ramen för projektet *The Connecting Point*, arkeologiska undersökningar med syftet att skapa en bättre kunskap om förhistoriska och medeltida aktiviteter längs den gotländska kusten.

Föreliggande rapport är en kortfattad redogörelse för det fjärde årets arkeologiska undersökningar inom ramen för projektet. En mer sammanfattande, slutlig och djuplodande redovisning kommer att ske efter att fältdelen inom projektet är avslutad och för en mer detaljerad redovisning av projektets mål och syfte hänvisas till de tre tidigare rapporterna från projektet; Rapport Arendus 2018:35, 2020:2 och 2020:34.

Syftet med årets undersökningar låg inom två avgränsade centrala frågeställningar. I det ena fallet var frågan om hur de omfattande spår av skilda typer av lämningar som nyligen påträffats omedelbart söder om vallanläggningen Gudings slott skall tolkas och förstås i sammanhang med vallanläggningen och de begravningar som finns i och omkring vallen (L2021:1494). Det rör sig synbarligen både om huslämningar av liknande konstruktion som de lämningar som tidigare undersökts ca 600 meter längre mot väster, såväl som gravar, diffusa stenhögar, en del stenrader och andra mer oklara konstruktioner.

Lämningarna sträcker sig i förlängningen av den ås som vallanläggningen Gudings slott är belägen på och längs en sträcka av ca 300 meter från vallanläggningen och söderut, ner mot den forna kusten.

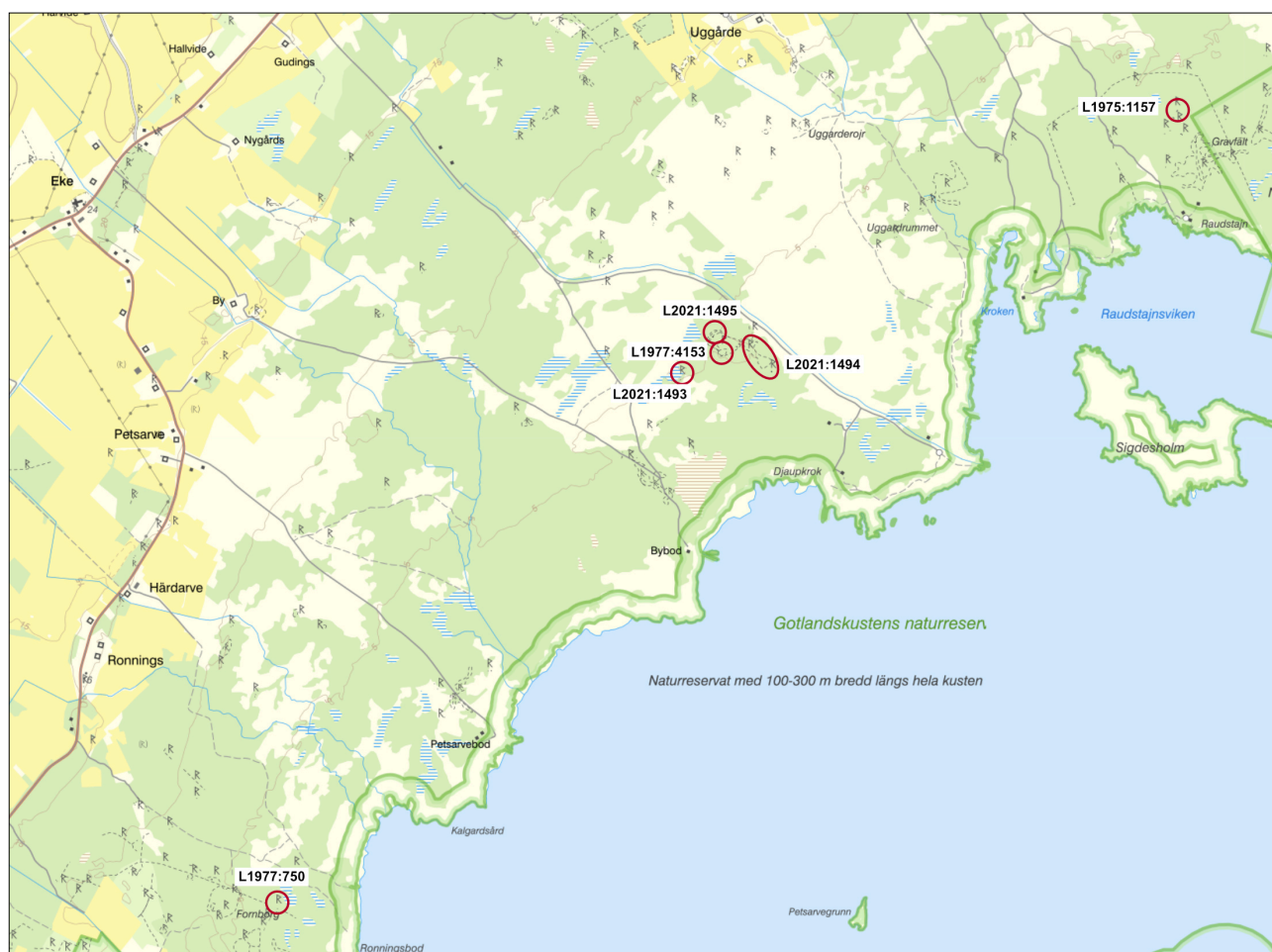
Den andra centrala frågan som skulle till del belysas med årets undersökningar rörde huruvida den bild som börjar framträda inom

Eke är att se som något specifikt för denna plats och socken, eller om historien som kan utläsas i Eke har sin motsvarighet inom angränsande bygder längs kusten. Med andra ord, om situationen i Eke vid Gudings slott, är ett unikum eller en del av ett generellt förlopp. För att något belysa denna fråga har begränsade arkeologiska utgrävningar skett inom såväl Rone socken som Grötlingbo socken (figur 2).

Undersökningsområdet

Den arkeologiska undersökningen under sommaren 2021 kom således att beröra tre skilda kustmiljöer, belägna inom tre angränsande socknar längs den sydöstra delen av Gotland (figur 1). Tyngdpunkten i årets arkeologiska undersökningar kom att handla om att få en bättre klarhet i hur de lämningar skall tolkas och förstås som nyligen upptäckts omedelbart söder om vallanläggningen Gudings slott i Eke socken (fornlämningsnummer L2021:1494). Genom markägarnas försorg har området röjts och gjorts tillgängligt och härvid har ett flertal mer eller mindre diffusa lämningar kunnat noteras och de är sammanförda till fornlämning L2021:1494, benämnd boplats- och gravområde. Vid de fortsatta fältinventeringarna har ytterligare lämningar påträffats som kommer att registreras i Fornreg inom ramen för årets undersökningar.

Utöver dessa lämningar söder om vallanläggningen, har även kompletterande undersökningar skett inom själva vallanläggningen Gudings slott, genom att en förmodad huslämning (L2021:1495) och två gravar undersökts, dessa senare inom gravfältet L1977:4153. Vidare inom området i anslutning till vallanläggningen Gudings slott har en förmodad grav, belägen ca 300 meter sydväst om vallanläggningen, undersökts (L2021:1493).



Figur 2. Kartan illustrerar belägenheten av de tre miljöer inom vilka arkeologiska undersökningar genomfördes under sommaren 2021, sett i relation till Eke kyrka och dagens bebyggelse. De undersökta lämningarna i Eke och Rone ligger ca 4 km från landsvägen, invid vilken gårdarna som regel återfinns idag. Källa Lantmäteriet.

En väsentlig fråga inför årets arkeologiska undersökningar har, som ovan nämnts, varit om den historia som börjar framträda inom Eke-lokalen är att förstå som unik, eller om motsvarande historia kan beläggas längs kusten inom andra områden. För att något belysa frågan genomfördes under sommaren initiala provundersökningar inom såväl Rone socken som Grötlingbo socken.

I Rone socken undersöktes en lämning som tidigare varit registrerad som grav, men som vid närmare betraktande visade sig vara en husgrund med tydliga skalmurar, av i princip samma form och utseende som inom Eke tidigare undersökta huslämningar (se tidigare rapporter). Fornlämningen i Rone, registrerad som L1975:1157, ingår i en synnerligen komplex och intressant fornlämningsmiljö,

bestående av såväl huslämningar som gravar, stenvallar, diffusa stenhögar, båtlämnningar som stenar med sliprännor, helt i linje med förhållandena i Eke.

I Grötlingbo socken, gränsande till Eke socken i väster, och inom en lokal om uppvisar samma typ av lämningar som vid Gudings slott, inte minst i form av en vallanläggning (fornborg), stenhägnader, diffusa huslämningar/tomtningar, gravar och stenar med sliprännor, kom en förmodad grav att undersökas (L1976:750). Syftet med undersökningen av graven, liksom av huslämningen i Rone, var både att belysa form och funktion och att tidfästa lämningen och relatera dem till historien i Eke.

I det följande avsnittet följer en översiktlig redogörelse för resultaten av årets

arkeologiska undersökningar. För en mer detaljerad beskrivning av årets undersökta fornlämningar/anläggningar, samt dateringar etc, hänvisas till kapitlet om anläggningar/schakt, i del 2 av rapporten.

Sist i rapporten finns en sammanställning av den osteologiska analysen och fyndlistor från de undersökta lämningarna samt rapporter över specialstudier rörande området utförda av i fältarbetena deltagande Masterstudenter från Uppsala Universitet, Campus Gotland och en Erasmusstudent från Bologna-universitetet i Italien, samt av detlagarna i fältgrupp 1.

Föreliggande avrapportering av årets arkeologiska undersökningar är att se som en delstudie och inte som en slutredovisning av projektet som helhet. Detta i och med att det nu planeras ett femte och ett sjätte år inom ramen för projektet till år 2023, varefter projektets samlade resultat kommer att sammanfattas i en slutpublikation.

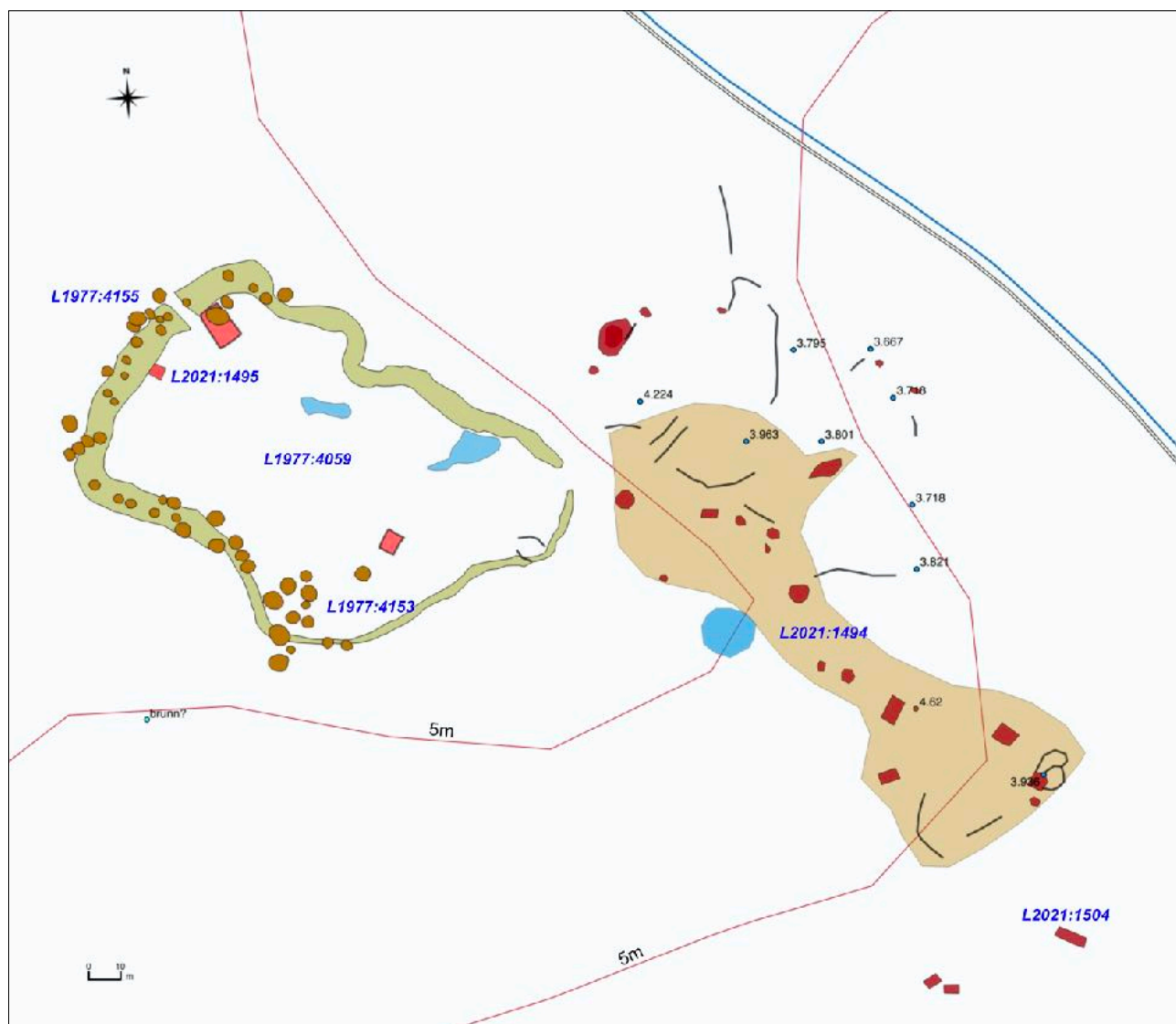
Undersökningarna i Eke

Området

Tyngdpunkten i de arkeologiska undersökningarna under sommaren 2021 har legat i området i anslutning till och inom vallanläggningen Guding slott. Huvudsakligen har det berört ett komplext fornlämningsområde som sträcker sig längs en svag ås söderut från södra delen av vallanläggningen Gudings slott. Här finns en ca 50 meter bred, flack ås som sträcker sig ca 300 meter mot sydöst, där den övergår i ett

flackt och öppet landskap som fortsätter ner mot dagens fiskeläge Djaupvik.

Området var tidigare täckt av tät ungskog med mycket stort inslag av sly, vilket har gjort det mer eller mindre omöjligt att kartlägga förekomsten av lämningar i området. Vi vet genom utmärkningen i laga skifteskartan, att här finns en form av "stenvall", vilket noterades av lantmätaren vid upprättandet av skifteskartan, men den täta vegetationen hade hittills gjort det närmast omöjligt att belägga



Figur 3. Förekommande lämningar vid vallanläggningen Gudings slott (L1977:4059). Utöver tidigare registrerade lämningar har under sommaren ytterligare lämningar kunnat identifierats. Det rör bland annat två husgrunder längst i sydöst i kartan och ett flertal diffusa stenhögar och svaga stenrader i östra delen som troligen hör ihop med rensning av den forna stranden från sten för att möjliggöra angörandet av båtar.

vad denna markering av lantmätaren stod för. Därtill är terrängen generellt synnerligen rik på större och mindre stenar vilket ytterligare försvårar tolkningen.

Genom att området på ett mycket förtjänstfullt sätt hade röjts av markägarna var det nu möjligt att också utläsa spåren i området. Åsen i sig utgörs uppenbarligen av grus och sten, där det förekommer generellt mycket stora mängder gråstenar, både av mindre och större storlek, vilket har gjort det vanskligt att avgöra av människan konstruerade anläggningar.

Kartbilden, figur 3 på föregående sida, illustrerar de lämningar som har kunnat identifierats, sätta i relation till vallanläggningen Gudings slott och där identifierade gravar. Bilden skall ses som ett minimum av anläggningar, då det säkerligen finns fler lämningar, men att de är mer eller mindre osynliga ovan jord, eller av sådan form att de kan tas som naturbildning. Det finns minst sju husgrunder inom området utanför vallanläggningen, därtill ett tiotal stenhögar av

skilda slag, där en del kan vara gravar. I den östra delen, i något lägre läge, finns ett flertal stenlagda terrasser och stensträngar, vilka möjligen markerar båtlänningar, kajer och avgränsningar av bebyggda delar.

Av de lämningar som har kunnat identifieras inom den avgränsade fornlämningen L2021:1494 har totalt tre husgrunder, tre lämningar av gravar/stenhögar och två områden med stensträngar undersökts eller delundersökts under sommarens fältkurs.

Tyngdpunkten i undersökningarna i Eke låg således inom området söder om vallanläggningen Gudings slott, men även tre lämningar inom själva vallanläggningen undersöktes. I den norra delen, med koppling till själva vallen, undersöktes en lämning som var upptagen i kulturmiljöregistret som husgrund (L2021:1495) och inom det gravfält som finns i södra delen av vallanläggningen (L1977:4153) undersöktes två gravar, som ett komplement till tidigare undersökta gravar¹.



Figur 4. I bildens borte del syns den svaga ås som sträcker sig från vallanläggningen Gudings slott (längs till höger i bilden) ner mot havet till vänster i bilden. På åsen finns talrika spår av huslämningar, stenhögar, kajkanter och möjliga gravar. I förgrunden är det lågt liggande, helt stenfria, forna, angöringsplatsen för båtar.

¹ Rapport Arendus 2018:35, rapport Arendus 2020:2

Ytterligare en förmodad grav, ca 2,5 meter i diameter, kom att undersökas i Eke, belägen ca 300 meter sydväst om vallanläggningen. Det rörde sig om en liten flack stenpackning belägen på krönet av en tydlig strandvall.

I det följande görs en översiktlig genomgång av undersökta lämningar med ett utkast till analys och tolkning. För en mer detaljerad redovisning av de enskilda undersökta lämningarna och för en överblick av undersökta lämningar hänvisas till del 2 i föreliggande rapport.

Fornlämning L2021:1494

Fornlämning L2021:1494 består av ett flertal skilda lämningar sammanförda till ett nummer i och med svårigheten att skilja dem åt och att

det av allt att döma finns mer av anläggningar än vad som har kunnat särskiljas i markytan (se figur 3). Av dessa lämningar kom 8 skilda lämningar att undersökas arkeologiskt till större eller mindre grad. De är numrerade 1-9 och består av ett par husgrunder, några troliga gravar, ett par oklara stenhögar och därtill stenvallar/kajskoningar.

House foundations

Husgrunderna i området är i flera fall väl synliga med tydliga skalmurar uppbyggda av varierade stenstorlekar, medan andra troliga huslämningar är mer diffusa. Genomgående är att de förefaller vara mer eller mindre raserade och de är i hög grad övertorvade vilket försvårar tolkningen.



Figur 5. Husgrunden, anläggning 5, sedd från väster mot öster ut mot det öppna landskapet. Skalmuren syns tydligast längs den vänstra långsidan i bilden.

Två husgrunder kom att undersökas i sin helhet vad gäller det inre rummet, där undersökningen av den tredje innebar att undersöka ett inhägnat område intill själva husgrunden, där husgrunden inte berördes av utgrävningen.

Den utan tvekan tydligaste huslämningen utgjordes av anläggning 5 (2021:1494), där man redan innan avtorvning och rensning kunde se formen av en skalmur (figur 5). Det anmärkningsvärda är stenstorleken som bildar grunden för huslämningen, där stenarna längs den östra kortsidan utmärker sig särskilt med mycket stora stenar. I denna husgrund fanns en tydlig härd längs den södra långsidan, anlagd på sådant sätt att den definitivt skall ses som en del av huset. Genom det kol som fanns i härden har anläggningen kunnat dateras och då till ett korrelerat värde på AD 655-707, det vill säga vendeltid.

Inga föremål påträffades överhuvudtaget inom eller i anslutning till husgrunden, förutom ett mindre ben av djur, troligen av får, inom anläggningen och en hästkosöm strax utanför det nordvästra hörnet av husgrunden.

De övriga två undersökta husgrunderna rörde en mindre, tämligen diffus anläggning längre mot nordväst längs åsen och ett område intill en husgrund längre mot sydöst. Den förra husgrunden var ca 6 x 5 meter stor och med en inre yta av ca 2,8 x 1,6 meter med diffusa vallar. Inga konstruktioner påträffades i den, inte heller framkom några föremål eller för den delen träkol som underlag för datering. Husgrundens form är en enklare variant av den ovan redovisade lämningen, daterad till vendeltid, men likväl av motsvarande konstruktion. För övrigt kan noteras att ingen av husgrunderna uppvisade några stolphål inne i byggnaden, inte heller några andra konstruktioner kopplade till byggnaderna.

Den tredje undersökningen som rörde en husgrund avsåg en husgrund i södra delen av åsen (L2021:1494:6). Denna husgrund avviker en del från övriga huslämningar genom att det

fanns tydliga stenvallar som inringar en yta intill husgrunden. Undersökningen av denna miljö kom att koncentreras till ytan utanför själva huslämningen, med tanken att det möjligen stod att återfinna mer material utanför husen än i husen. Det visade sig också



Figur 6. Eldstaden intill södra långväggen i huset anläggning 5, med kraftigt skörbrända större stenar.

att här fanns en markant härd, belägen direkt intill en av de stenmurar som kopplar till husgrunden, med skörbrända större stenar och kol. Intressant att notera är att även denna anläggning kunde dateras till vendeltid (AD 673-876), i likhet med huslämningen anläggning 5. I direkt anslutning till en av stenvallarna till husgrunden påträffades också en välbevarad fibula från 400-tal, dvs övergångstid romersk järnålder-folkvandringstid.



Figur 7. En välbevarad fibula från omkring AD 400, påträffad i kanten av stenvallen intill husgrund 6 (L1494:6).

Det är rimligt att anta att de dateringar som erhållits från elstäderna utgör något av en slutdatering av användandet av dessa konstruktioner. Däremot är det svårare att avgöra hur långt bak i tiden verksamhet har förekommit inom området. Fyndet av fibulan från 400-talet pekar mot att verksamheten i området har rötter i åtminstone sen romersk järnålder, vilket dock inte automatiskt innebär att huslämningen också har det.

Sammantaget, trots frånvaron av datering av ett av de tre husen, är det tydligt att dessa skall knytas till vendeltid. Frånvaron av föremål, kulturlager och andra konstruktioner i dessa gör det vanskligt att tolka deras funktion, men belägenheten på en udde ut i det dåtida havet indikerar uppenbarligen att de har med fiske och jakt vid havet att göra.

Gravar/stenhögar

Vid sidan om dessa husgrunder kom även tre runda stenhögar att undersökas, vilka hade tolkats som möjliga gravar innan undersökning. Två av de undersökta stenhögarna var upp till 5 meter i diameter och en var 2,5 meter. De är numrerade som L2021:1494 anläggning 1, 2 respektive 4 (se beskrivningarna och placeringen av dessa i del 2 av rapporten). De var tämligen svåra att avgränsa och det fanns ingen tydlig kantkedja eller andra tecken på att det rör sig om gravar, enbart att de föreföll vara närmast runda innan undersökning.

Den mindre av dem bestod av en närmast cirkelformad anläggning omgiven av tämligen

stora stenar och med ett lågt liggande centralt område (L2021:1494 Anl. 2). Undersökningen visade inte på några konstruktioner, där stenar synbarligen låg direkt på det sterila gruset. Inga föremål, inget kol och inga konstruktioner i övrigt kunde noteras.

Det är inte orimligt att det rör sig om en naturbildning, med tanke på åsens allmänna innehåll av omfattande mängder av sten av varierande storlek.

Längre mot söder kom en större anläggning att till hälften undersökas (L2021:1494 Anl. 4). Det rörde sig om en oregelbunden stenhög bestående av flera lager av sten där inga konstruktionsdetaljer med säkerhet kunde noteras. Anläggningen innehöll inga föremål. I botten, under flera lager sten, framkom en del träkol utan någon tydlig koppling till en härd eller annan anläggning. En datering av detta kol gav som resultat AD 244-402 korrelerat, dvs yngre romersk järnålder. Det är dock oklart vad detta kol hänför sig till, men med tanke på dess läge i relation till stenpackningen är det mycket som talar för att den ger en indikation om ålder på stenpackningen.

Den tredje tolkade möjliga graven (bilden nedan) inom fornlämning L2021:1494 var belägen omedelbart söder om södra delen av



Figur 8. Inom anläggning L2021:1494 anläggning 1 fanns en tydlig mindre stencirkel av större stenar som bildade en trolig forn av gravläggning. Inom denna cirkel påträffades ett antal delar av grova rörben, sannolikt från människa, daterade till tidig romersk järnålder.

vallanläggningen Gudings slott, på en svag höjd i landskapet (L2021:1494 Anl. 1). Den framträdde som en diffus och oregelbunden flack stenhög där ytterkanten bestod av en del större stenar som ställvis kunde tolkas som kantkedja, eller, längs den östra sidan, som grund för en husgrund. Den var med andra ord tämligen diffus till formen och svårtolkad.

Undersökningen gav inget klart svar om hur anläggningen som helhet skall förstås. Några föremål, utöver en hästkosöm, påträffades inte. Endast inom ett område, i nordvästra delen av anläggningen, fanns en konstruktion som indikerade en möjlig grav. Den utgjordes av en rund anläggning, ca 2 meter i diameter, bestående av en kant av större gråstenar med ett inre med enstaka stenar.

Bland dessa stenar, centralt i anläggningen, kom en handfull obrända ben, totalt 48 gram, i form av 35 fragment, 0,5-7 cm stora. Det rörde sig om delar av rörben, troligen från människa. ¹⁴C datering av benen gav en datering till AD 23-203. Om dateringen stämmer ("the sample shows a heighten C/N-value, which means that BP-age should be interpreted with cushion"), så är det de första spåren av att begravningar har skett i området under den tid som själva vallanläggningen troligen var i bruk.

De tre undersökta möjliga gravarna gav ingen säker slutsats om hur de skall tolkas. Endast i en av dem påträffades ben som kunde knytas till mest sannolikt människa, med avseende på de övriga gravliknande lämningarna gavs inget tydligt svar om alla dessa mer eller mindre rundastensamlingar skall ses som gravar. Det har tidigare noterats att det är synnerligen vanskligt att avgöra vad som är naturlig förekomst av sten och vad som är att se som man made constructions.

Det är mycket troligt att det finns fler lämningar som skall knytas till denna kategori och det är inte orimligt att här ryms flera gravar. Man kan dock konstatera att de utförda undersökningarna av lämningar inom

nämnda fornlämning långt ifrån har gett en fullständig klar bild av förhållandena inom området, men resultaten hittills ger dock en tydlig vink om att det handlar om en form av "fiskeläge" från vendeltid, med troligt ursprung i yngre romersk järnålder-folkvandringstid.

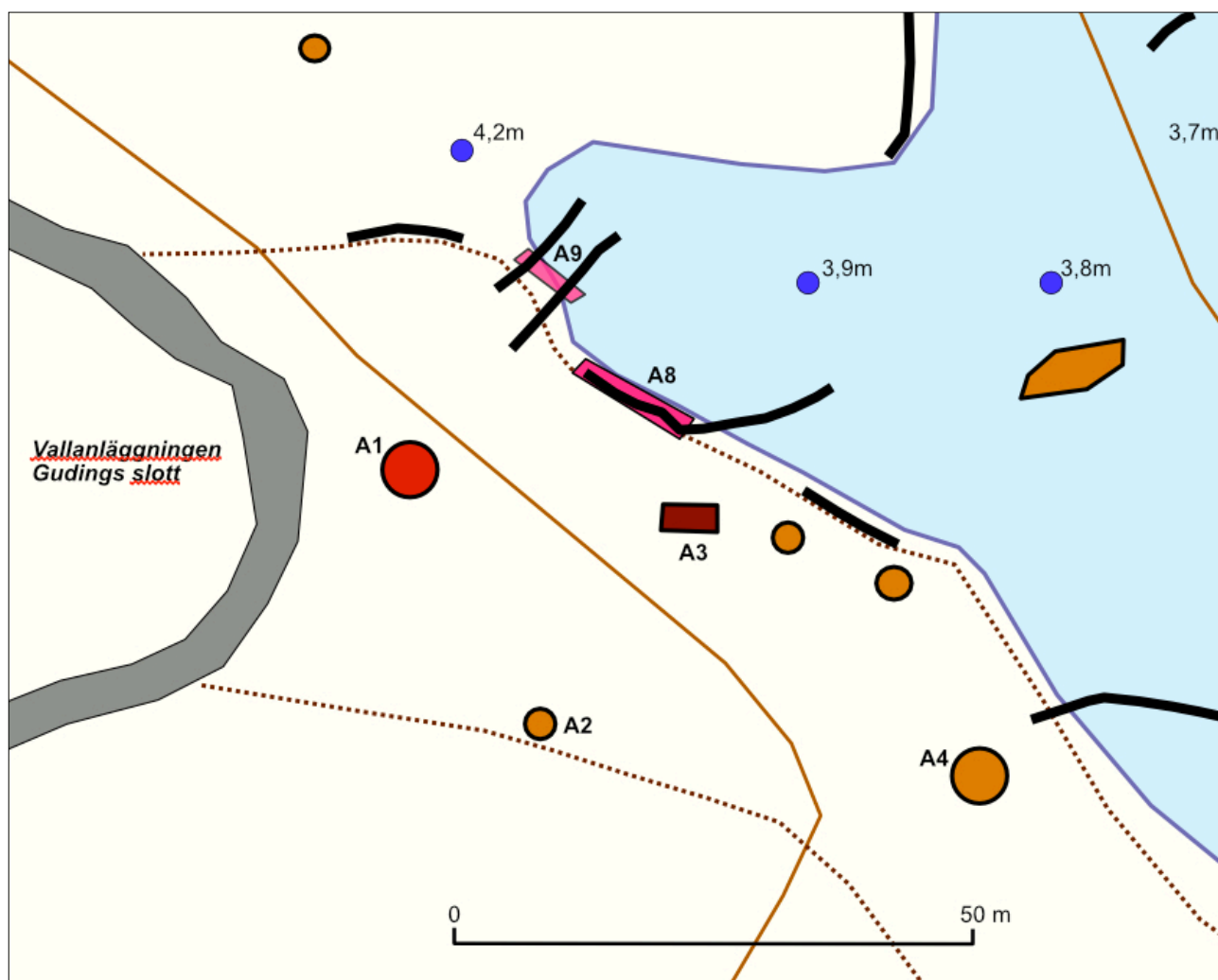
Terrasser, stenvallar och möjliga kajer

Den tredje kategorin lämningar inom området betecknas som terrasser, vallar etc, uppbyggda av sten. De återfinns framför allt öster om åsen och huvudsakligen parallellt med den, i övergången till de låglänta områdena vilket indikerar att det kan röra sig om rester av landningsplatser för båtar, kajer om man så vill (figur 9). Nivån de ligger på är ca 3,6 till 4 meter över havet. Man kan tydligt se att särskilt ett område, som i östra kanten avgränsas av ett större, avlångt röse, med sten, är helt stenfritt, vilket ger ett starkt intryck av att området är avsiktligt röjt från sten, då med avsikt att kunna ta in båtar till strandvallen. Några av stenvallarna går i rät vinkel från det lägre liggande området, bildar två parallella rader och ger ett intryck av en båtlänning eller en form av rensad väg ner mot det lägre liggande området.

Man kan också notera att utanför åsen mot norr och nordost finns flera, låga stenvallar av okänd funktion, men som rumsligt kopplar till stenvallarna och möjligen skall de ses som delar av en form av landningsplats/hamnplats för båtar av mindre modell.

På två ställen bland dessa terrasser och vallar genomfördes kortare eller längre smala schakt för att försöka utröna deras konstruktion, funktion och tidsställning. I det ena fallet torvades en tydlig terrasskant fram för att få en bättre bild av dess konstruktion. Längs en sträcka på ca 7 meter rensades terrassen fram ner till ett sterilt gruslager (L2021:1496 Anl. 8).

Undersökningen visade att det fanns en tydlig rad av stenar som bildade en form av skoning



Figur 9. Schakten som berörde anläggning 8 och 9 markerade med violett färg. Prickad brun linje markerar åsens sträckning och med blått är inlagt den ungefärliga strandlinjen omkring tiden för romersk järnålder. Blå prickar visar exakt inmätta höjdpunkter. Numreringen av anläggningarna hänför sig till del 2, redovisningen av undersökta anläggningar.

längs kanten av den nord-sydgående åsen och på vars västra och högre belägna sida, finns flera lämningar, medan det på östra sidan var ett lågt liggande område i det närmaste helt fritt från sten. Någon datering av anläggningen kunde dock tyvärr inte uppnås, inga fynd eller kolhorisonter påträffades som kunde bistå i en tolkning om tid för anläggningen.

Det är dock tämligen tydligt att det rör sig om en kantskoning till terrassen och möjligen att ytan öster om terrassen utgjort en anlösningsplats för båtar. Ytan ligger på en höjd idag av ca 3,6 meter över havet och räknar man med att det skett en uppgrundning och igenväxning av den forna stranden på ca 0,5 meter kommer med en vattennivå på ca 3,1

meter över dagens havsnivå innebära en datering till tidig järnålder, om vi räknar med en landhöjning på 2 meter på 1000 år. Den tiden rimmar väl med de spridda dateringar som finns från skilda ställen inom vallanläggningen Gudings slott, liksom på två dateringar som erhållits under årets undersökningar, med dateringar till tidig romersk järnålder.

Den andra lämningen som undersöktes i form av stenvallar utgjordes av två parallella stenrader, omgivande en svag sänka (anläggning 9, figur 9). Vallarna löper vinkelrätt mot den ovan refererade terrassen och på ett inbördes avstånd av ca 1,5-2 meter. De börjar i det lägre liggande området i öster och kan följas upp på höjden västerut upp mot



Figur 10. Anläggning 9, bestående av två parallella stenrader som löper från höjden i bildens bortre del, ner mot det lägre liggande området i öster.

ovan omnämnda anläggning som tolkats som en trolig rest av grav. Stenvallarna kan tolkas huvudsakligen på två sätt. Antingen rör det sig om vad vi benämner som båtlänning, dvs en från sten rensad ränna i strandkanten omgiven av två stenvallar, mellan vilka man drog upp båtar till torra land. Eller så handlar det om en form av väg ner mot det lägre liggande området omgiven av två stenvallar. Med tanke på den nyss nämnda terrassen och det stenfria området öster ut är det mest sannolika att det handlar om en båtlänning, vilket i så fall stärker tanken att det har varit en anöringsplats för båtar öster om åsen någon gång under tidig järnålder.

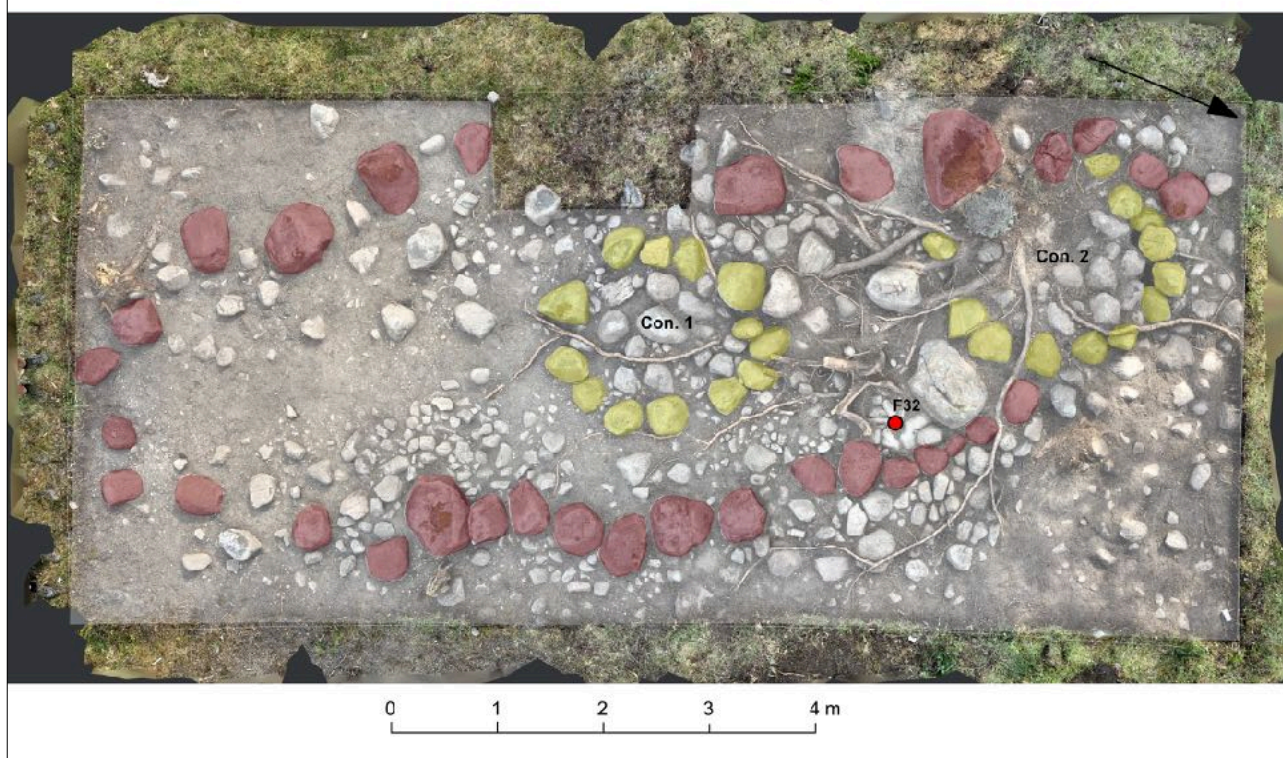
Fornlämning L2021:1504

Följer man den ovan omnämnda åsen med alla dess lämningar finns i förlängningen ytterligare lämningar ca 50-100 meter längre mot söder. I skogskanten i sydväst finns två husgrunder av samma typ som ovan redogjorts för, belägna intill varandra och på en svag höjd (L2021:7238). Dessa husgrunder

har inte undersökts men de är av samma karaktär som övriga husgrunder inom området och bör säkerligen ses i samma sammanhang.

Däremot kom en annan lämning, belägen ca 50 meter öster om denna, att till del undersökas (L2021:1504). Den tolkades initialt som ytterligare en husgrund, då man svagt i markytan kunde ana två rader av större stenar, vilka dock inte visade spår av skalmur och de var därtill inte helt raka utan bildade mer eller mindre två konkava linjer.

Den södra delen av anläggningen kom att undersökas och det visade sig att de två delvis parallella stenraderna närmast bildade en skeppsliknande form och att det inom den ramen fanns minst två tydliga mindre, närmast runda anläggningar, ca 2 meter i diameter, som närmast gav ett intryck av gravar. De påminde till en del om den del av anläggning 1 som tolkats som en grav, både vad gäller storlek, form och stenstorlek.



Figur 12. Skeppsformad konstruktion med möjligen två gravar, varav Con 1 undersöktes. F32 visar platsen för fyndet av en lansspets.

En av dessa två delanläggningar kom att undersökas och det visade sig att det centralt i anläggningen förekom ett lager med brända ben. Den osteologiska analysen gav vid handen att de ben som kunde identifieras visade att det rörde sig om ben från djur, men att det även fanns två kranieben som tolkades som troligen människa. En ^{14}C analys av de

brända benen gav som resultat en datering korrelerad till AD 415-540, dvs folkvandringstid.

Utöver denna grav framkom spetsen av en lans stående på kant med spetsen uppåt mellan några större stenar utan synbar kontakt med någon grav eller annan konstruktion.



Figur 12. Lansen.

Lansen är svår att mer exakt datera men torde att döma av formen höra hemma i folkvandringstid eller vendeltid.

Man kan notera att dateringen av graven ligger i linje med åldern på den fibula som påträffades i kanten av en stenvall i anslutning till konstruktion L2021:1494 anl. 6.

Undersökningar inom Gudings slott

Årets undersökningar kom även att innebära tre begränsade undersökningar inom själva

vallanläggningen Gudings slott. I norra kanten, på insidan av vallen, fanns en svag antydan till en husgrund ca 6x4 meter stor, som troligen till del fortsätter in under rasmassorna från muren (L2021:1495). Denna kom till del att undersökas.

Den visade sig bestå av en synnerligen diffus ram av större sten som troligen utgjorde den ursprungliga husgrundens yttermurar. Anläggningen föreföll vara kraftigt raserad. Några föremål, eller för den delen, kolhorisonter, påträffades inte, förutom en tand av får. Denna kom att dateras men det är

L2021:1495. Layer I



Figur 13. Lodbild.

0 1 2 m

mycket tveksamt om den kan knytas till själva anläggningen. ¹⁴C datering av tanden gav värdet AD 1330-1448. Några konstruktioner i övrigt, såsom stolpål eller härdar eller liknande lämningar, påträffades inte.

I den södra delen av området inom Gudings slott, finns ett gravfält om ca 14 gravar (L1977:4153). Ett antal av dessa har tidigare undersökts och gett dateringar till 1000-talet till 1200-talet, där de flesta gravlagda utgjordes av kvinnor (se tidigare rapporter från projektet).

För att fördjupa kunskapen om datering och könsfördelningen inom gravfältet kom två anläggningar att undersökas under den

gångna sommaren, där den viktigaste anläggningen var den som låg i östra kanten av gravfältet, tämligen isolerad från övriga gravar inom gravfältet (L1977:4153 Anl. 7). Därtill kom en mindre anläggning längre i väster att undersökas (L1977:4153 Anl.8), belägen i anslutning till den här starkt raserade muren. Den senare visade sig inte innehålla några spår av någon begravning och det är oklart om det rör sig om en grav.

Den östra graven var en rund stensättning, ca 5 meter i diameter med en djupt nedgrävd central grav innehållande en man, liggande i nordsydlig riktning med huvudet i söder och fötterna i norr (anläggning 7.2.) Han var gravlagd med ett stort ringspänne, kniv och

Go. Eke sn. 2021. L1977:4153. Anl. 7. Layer II



Figur 14. Lodbild över graven med kantkedja



Figur 15. Skelettet med föremål. F4 är ringspännet, F5 är bältesöljan och F8 är kniven.

hade ett läderbälte runt midjan. Möjligen låg han under någon form av fäll. Intressant att notera var att vid huvudet fanns ben av en liten fågel. Ringspännet ger en klar datering till sen vikingatid, vilket också verifieras av en ^{14}C datering av mannen, där dock dateringen kan gå in i tidig medeltid i likhet med flera andra gravlagda på detta gravfält. Åldern med hjälp av ^{14}C gav datering till AD 1044-1218.

Den osteologiska analysen ger vid handen att mannen torde ha varit mellan 40-50 år när han dog och längden har beräknats till ca 176 cm, vilket får ses som tämligen normalt för vikingatidens gotlänningar (se vidare den osteologiska rapporten, bilaga 2).

Det kanske mest anmärkningsvärda med anläggningen var att i dess västra kant, tämligen grunt, påträffades rester av ytterligare ett skelett i form av delar av kranium och arm. Att döma av tändernas förslitning förefaller det röra sig om en person mellan 35-40 år. Däremot går det inte att klargöra vilket kön det handlar om.

I anslutning till detta skelett påträffades ett liten och välbevarad bryne av skiffer och strax söder om fanns ett stort antal krukskärvor av ett krossat kärl. Det är dock något oklart om

dess krukskärvor skall kopplas till denne person, men med tanke på placering intill skelettet och att nivån under markytan för krukskärvorna var samma som för skelettet, är det möjligt att de hör ihop.

Det anmärkningsvärda med skelettet är den datering som blev resultatet av ^{14}C analysen, som gav värdet AD 1475-1644! Från laboratoriet har de dock skickat med en brasklapp om att "The sample shows a heightened C/N-value; BP-age should be interpreted with cushion". Det kan finnas skäl att låta göra ytterligare en ^{14}C datering av detta skelett för att uppnå en säkrare bedömning av tiden för denne person från fallet.

Fornlämning L2021:1493

Ca 300 meter sydväst om vallanläggningen Gudings slott finns på en tydlig ås i det flacka landskapet en mindre, tämligen kompakt stenpackning, tolkad som en trolig grav. Anläggningen kom att undersökas som en del i fältarbetet den gångna sommaren. Den visade sig bestå av ett lager av 0,1-0,3 meter stora stenar, liggande tämligen tätt och ovanpå och kring ett större jordfast stenblock.



Figur 16. Lodbild efter avtorvning.

0 1 2m

Inga föremål påträffades, inte heller något kol eller andra spår av mänsklig påverkan. Anläggningens funktion är oklar. Det kan möjligen röra sig om en fyndtom grav, vad som brukar benämnas kenotaf, i likhet med de tre anläggningar som undersöktes längre mot norr föregående år, som inte heller innehöll några föremål eller ben. Dessa var dock tydligt uppbyggda av människor, genom förekomsten

av en pryddlig kantkedja på två av dem. Så var inte fallet här.

Stenhögen är dock tveklöst hopplockad av människor och där det centrala stora stenblocket utgjort grunden för konstruktionen.

Undersökningarna i Rone socken

Frågan om historien upprepar sig

En väsentlig fråga som över tiden blivit allt mer central inom projektet rör frågan om situationen i Eke är ett unikum eller om historien upprepar sig längs den gotländska kusten generellt och framför allt specifikt längs intilliggande kustpartier längs den sydöstra delen av Gotland, det vill säga att situationen vid Eke är mer att se som karaktäristisk för den gotländska kusten och inte som en unik företeelse.

Vad gäller landskapet vid kusten i Eke, så som det kommer till uttryck i form av flacka, obebodda kustområden, kan man snabbt konstatera via kartor att situationen med detta öppna obebodda beteslandskap som är för

tunna jordlager på bleke och med stort inslag av stenar deponerade under senaste istiden.

Fördelningen av fornlämningar längs kusten, från det idag strandnära läget, upp till nivåerna för bronsålderns rösen på en ca 6-7 meter över havet, går igen inom hela denna kuststräcka.

Inte minst kan man också notera den talrika förekomsten av stenar med sliprännor och slipytor, genomgående belägna på en höjd över havet mellan 2 och 3 meter. Intressant är också, precis som i fallet Eke, att notera den nära rumsliga kopplingen mellan områden med stenar med sliprännor och slipytor med förekomsten av äldre fiskelägen.



Figur 17. Centralt i bilden mot kusten finns Gudings slott. Det öppna och obebodda landskapet börjar till höger i östra delen av Grötlingbo socken, fortsätter öster ut (till vänster i bilden) förbi Ronehamn, som skimtar i bildens vänstra hörn, till Burs socken länge mot väster. Foto Google Earth.

handen i Eke, även finns inom en större kuststräcka längs denna del av Gotland; från Grötlingbo i väster till och med Burs i öster och möjligen in en del i När sockens västra kustområde.

Det handlar här således om ett landskapsrum som synbarligen aldrig varit nyttjat för boende och odling. Därtill är markerna för dåliga,

Sett i ett ytligt rumsligt perspektiv är det tämligen uppenbart att den rumsliga bild som är för handen i Eke, har sin direkta motsvarighet på flera ställen längs kuststräckan Grötlingbo-Burs.

Raudstajn

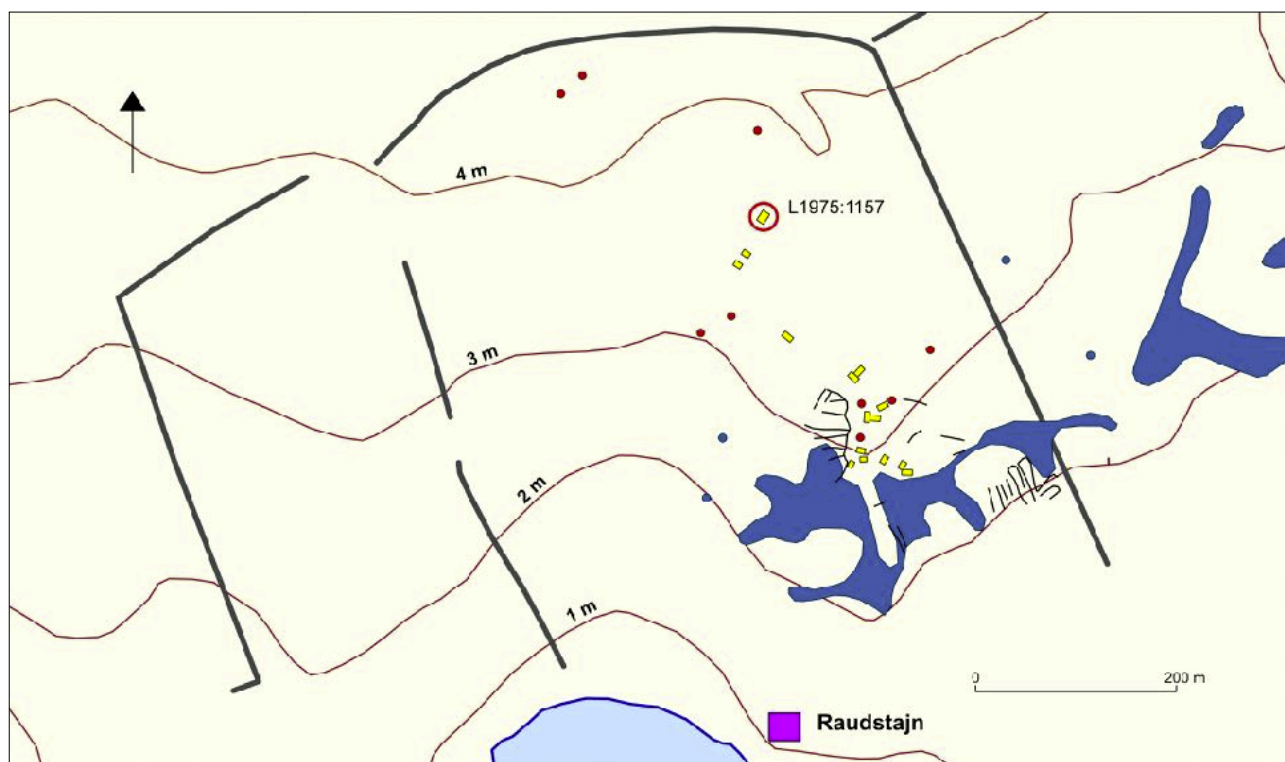
Den plats som kom att undersökas närmare inom Rone socken ligger intill det historiska

fiskeläget Raudstajn. Utgångspunkten för undersökningen här var att, i likhet med situationen i Eke, här finns såväl områden med stenar med sliprännor som massiva stenhägnader, husgrunder, möjliga gravar och antydning till båtlänningar och andra kustanknutna spår av äldre verksamheter.

Under våren, innan de arkeologiska undersökningarna påbörjades, fältinventerades lokalen i Rone, varvid registrerades ett stort antal lämningar som tidigare inte noterats. Därtill kom ett antal lämningar att omdefinieras, bland andra då

byggt på erfarenheterna från årets resultat av de arkeologiska undersökningarna i Eke, Rone och Grötlingbo.

Den rumsliga bild som framträder efter fältkarteringen visar på en mycket komplex miljö, helt i linje med situationen i Eke, även om här inte finns en vallanläggning motsvarande Gudings slott. Men en minst lika imponerande stenvall omger området, en stenvall som inte kan knytas till några historiska gränser och vars ändar slutat på ca 1 meter över havet.



Figur 18. Lämningarna i anslutning till fiskeläget Raudstajn. Blå prickar och blå områden är stenar med sliprännor och slippytor, röda prickar är tolkade gravar och gula markeringar tolkade husgrunder. Smala svarta streck markerar båtlänningar och de kraftiga svarta linjerna är stenvallar.

den anläggning som provundersökningen kom att beröra. Det gällde L1975:1157, som i inventeringen noteras som grav, men som i själva verket utgörs av en välbyggd, väl synlig och väl avgränsad husgrund med skalmur. Det finns anledning att anta att många av de lämningar av diffus karaktär som ligger längs kusten på motsvarande nivåer över havet i många fall kan vara felregistrerade, inte minst

Innanför denna stenvall, som är ca 2-3 meter bred och upp till 0,8 meter hög, uppbyggd av såväl kraftiga som mindre kraftiga gråstenar, finns ett stort antal lämningar, huvudsakligen lokaliserade till en markant ås som löper från land ut mot fiskeläget, på samma sätt som från Gudings slott och ut mot fiskeläget Djaupkrok. Det rör sig om svårtolkade lämningar, men i vissa fall är det helt klart frågan om



Figur 19. Runt området med huslämningar, gravar, båtlanningar etc går en kraftig stenvall, väl framträdande i landskapet.

husgrunder av en karaktär som motsvarar vad som är för handen i Eke.

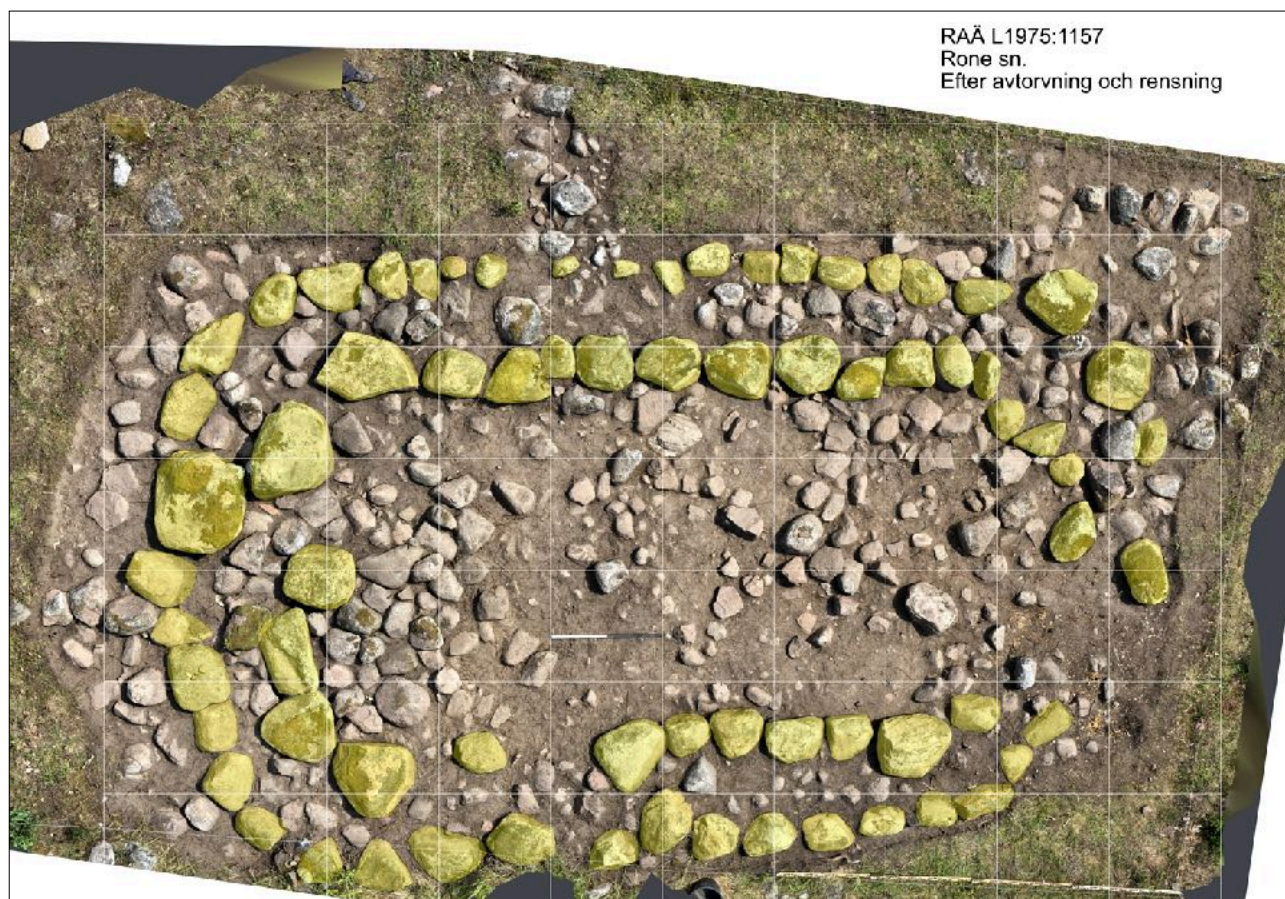
Därtill finns ett stort antal stensamlingar som kan vara gravar, men det kan också röra sig om andra former av konstruktioner. På ett ställe förefaller det finnas ett mycket stort och kraftigt stolphål, av samma karaktär som påträffades i Eke vid våra arkeologiska undersökningar 2019 inom ramen för projektet The Connecting Point (Rapport Arendus 2020:02).

Fornlämning L1975:1157. Husgrund

De arkeologiska undersökningarna i Rone socken kom således att koncentreras till en husgrund, ursprungligen registrerad som en grav, men nu omtolkad till husgrund (L1975:1157). Husgrunden ligger på en svag höjd som löper i nordostlig- sydvästlig riktning och en bit norr om den centrala



Figur 20. Husgrunden sedd från öster efter avtorning och rensing.



Figur 21. Lodbild över husgrunden efter avtorvning och rensning med skalmuren markerad.

koncentrationen av huslämningar, gravar, båtlämningar etc strax norr om Raudstajns fiskeläge. I åsens förlängning mot väster finns antydning till flera husgrunder, på ett avstånd av ca 50 meter från nu aktuell lämning.

Husgrunden påminner till form och storlek starkt om husgrunden L1494 anl 5 som undersöktes söder om vallanläggningen i Eke, ovan omnämnd. Den är ca 9x6 meter stor (NO-SV) och består av en tydlig skalmur ca 1, meter bred, som i dess östra kortsida utgörs av en markant vall med stora stenar, på samma sätt som husgrunden anläggning 5 i Eke.

Någon säker ingång kunde inte noteras men troligen har den varit i väster. Inga inre konstruktioner kunde noteras, inga stolphål, ingen elstad och ingen tydlig inre avdelning av rummet, även om en svag antydning fanns till en möjlig sådan.

Inga föremål påträffades i husgrunden över huvud taget, inga horisonter av kol och inga ben, förutom en, säger en, tand av nöt. Den påträffades i husgrundens inre östra del, tämligen långt ner och skall av allt att döma knytas till anläggningen, något som inte motsägs av den datering genom ¹⁴C som erhöles av denna. Den visade sig vara från perioden AD 774-974 korrelerat, dvs sen vendeltid-tidig vikingatid.

Undersökningarna i Grötlingbo socken

Den komplexa miljön

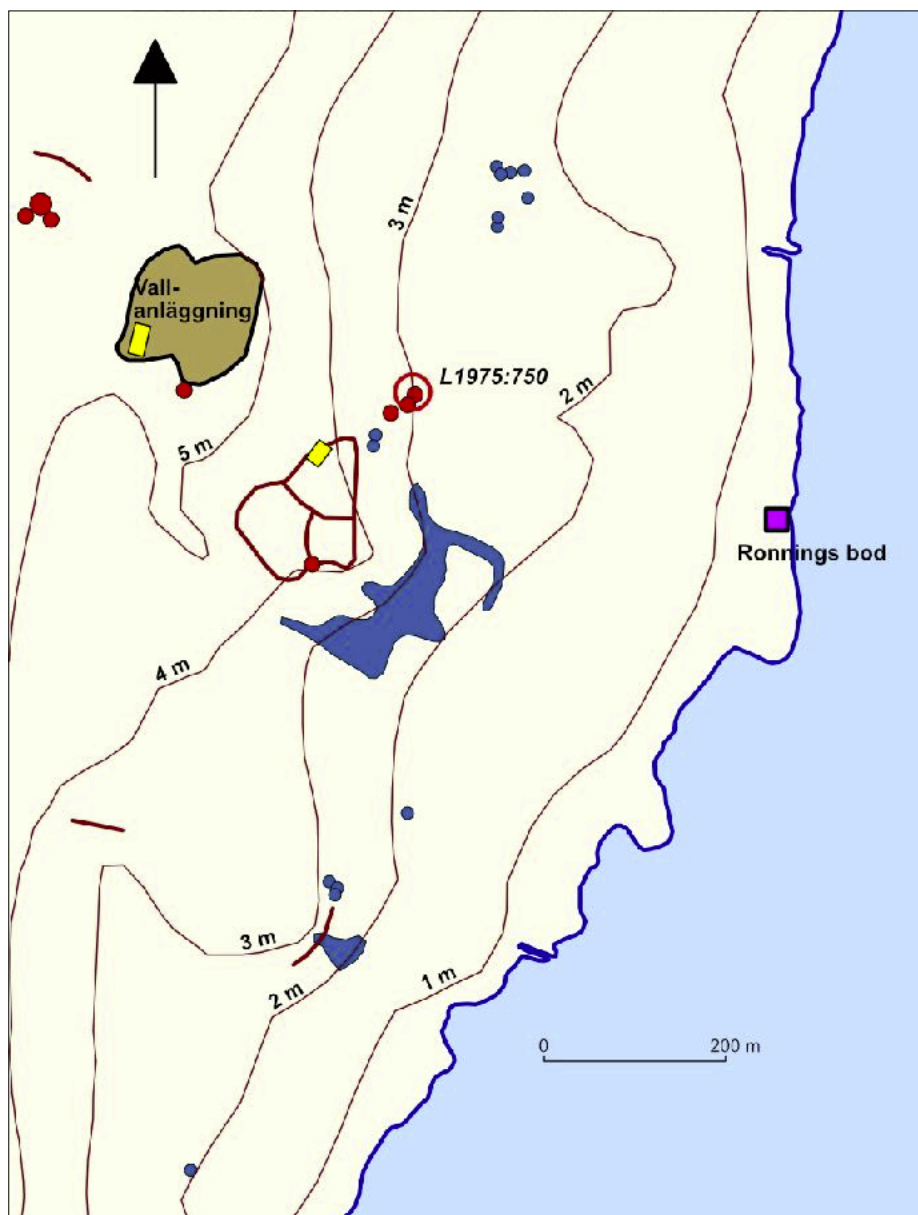
Det andra området som var aktuellt för en mindre sonderingsundersökning rörde ett område beläget i Grötlingbo socken, nära gränsen till Eke, och ca 3,5 km väster om Gudings slott. Miljön påminner starkt om förhållandena vid Eke vad gäller såväl landskapet i sig som förekomsten och den rumsliga utbredningen av fornlämningsarna.

Även här finns en vallanläggning (fornborg) av samma karaktär som den i Eke (Gudings slott). Den är, liksom den i Eke, kraftigast mot norr och tämligen diffus mot söder. I norr kan skönjas minst en tydlig ingång och även här finns antydning till gravar i och omkring vallen i norr, liksom också en husgrund med kraftiga vallar av sten. Nivån över havet är helt i linje med förhållandena i Eke, dvs omkring 5 meter över havets nivå.

Söder om vallanläggningen, ner mot havet och parallellt med kusten, finns ett stråk med lämningar i

form av stenvallar, husgrunder, enstaka gravar och, något lägre liggande, områden med stenar med sliprännor och slipytor. Längre ut mot havet ligger här, liksom både i Eke och i Rone, ett historiskt fiskeläge, Ronningsbod.

Det bör noteras att kartan bygger enbart på uppgifter ur kulturmiljöregistret. Området är inte ännu fältinventerat, vilket med stor sannolikhet kommer att förändra bilden på ett tydligt sätt. En kompletterande fältinventering



Figur 22. Fornlämningsmiljön vid Ronnings mot bakgrund av nivåerna över havet. Blå prickar och blåa ytor är stenar med sliprännor och slipytor, röda prickar gravar och gula markeringar husgrunder. Röda linjer stensträngar/vallar. Vallanläggningen (fornborgen) markerad. Den undersökta graven markerad med röd cirkel.

är planerad att genomföras inför sommaren 2022 års fältarbeten.

Området utgör som det är känt idag med andra ord, en tämligen omfattande fornlämningsmiljö med spår av äldre tiders kustanknutna verksamheter från sannolikt sen bronsålder/tidig järnålder upp till våra dagar.

Fornlämning L1975:750. Grave (?)

Den testgrävning som skedde här innebar en undersökning av en av de registrerade gravar som återfinns på en nivå av drygt 3 meter över havet. Det rör sig om en liten gravgrupp om tre gravar, varav en är betydligt större än de två övriga. De ligger till del i ett tidigare skogsområde, nu avverkat och omlagt till betesmark, men det är ännu svårt att få en bra bild av anläggningarnas form och utbredning.

Syftet med undersökningen av den förmodade graven var att få en datering av den som en

initial del i forskningen om området och kunna sätta den i relation till förhållandena i Eke.

Anläggningen utgjordes av en närmast rund stensättning med en svag antydning till kantkedja, bestående av större och mindre gråstenar. Den var anlagd på en svag höjd i landskapet.

Anläggningen grävdes i sin helhet utan minsta spår av vare sig skelettdelar, ben generellt, fynd eller för den delen kolhorisonter. Inga konstruktioner i övrigt kunde noteras och det enda fyndet som påträffades var en tand av nöt som kom att användas för ¹⁴C analys.

Tyvärr var benmaterialet i tanden allt för dåligt för att kunna användas till analysen, vilket gör att vi inte har någon möjlighet att datera anläggningen över huvudtaget utom indirekt i relation till landskapet, höjden över havet och kopplingen till andra fornlämningar



Figur 23. Anläggningen efter avtorning och rensning.

i närområdet. Dess läge intill andra lämningar av typer som brukar kunna dateras till tidig järnålder antyder att även denna anläggning är troligen från denna tid, vilket dock får tolkas som en kvalificerad gissning i nulaget.

Även anläggningens funktion är oklar och det går inte utan mer omfattande undersökningar av intilliggande anläggningar få en möjlighet till kunskap om lämningens funktion. Form och storlek indikerar det vi kallar grav, frånvaron av möjlighet till odling i området motsäger tolkning att det rör sig om ett röjningsröse. Det får tills vidare konstateras att mycket återstår att undersöka i Grötlingbo, liksom i Rone, för att erhålla ett tydligare svar på frågan om det är en motsvarande verksamhet som kan utläsas ur lämningarna i Rone och Grötlingbo som i Eke. Kommande fältarbeten kommer förhoppningsvis tydligare klargöra denna fråga om generell bild av utvecklingen längs denna del av den gotländska kusten.

Konklusioner och utblickar

Syftet med 2021 års undersökningar

Årets arkeologiska insatser inom ramen för projektet The Connecting Point hade två huvudsyften. I det rena fallet handlade det om att få ett grepp om tidsställning och funktion avseende de talrika spår av äldre verksamhet som finns som ett stråk mot söder utgående från vallanläggningen Gudings slott, belägen på en svag ås, sträckande sig ner mot det historiska fiskeläget Djaupkrok.

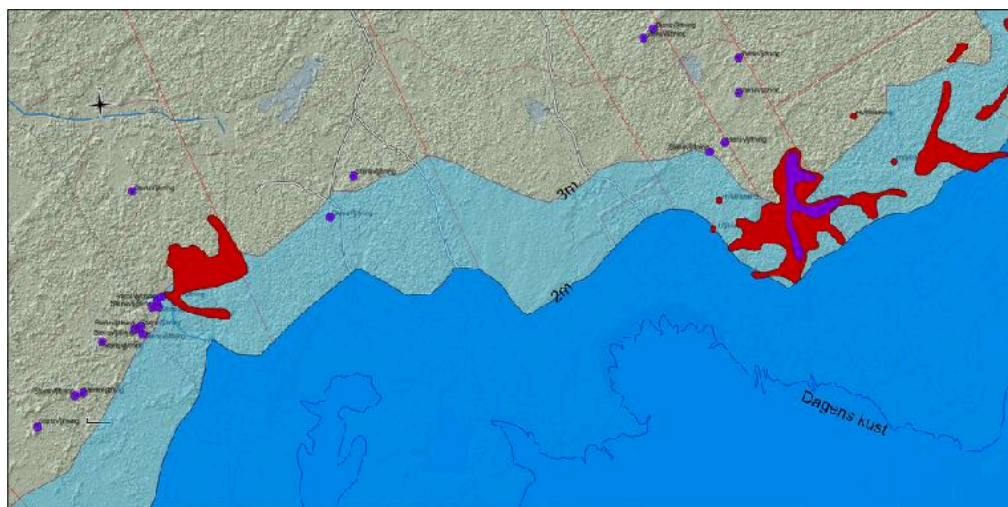
Härvid kan sägas att dateringarna av undersökta lämningar längs åsen visar på en verksamhet från romersk järnålder till vendeltid som på ett avgörande och intressant sätt knyter an till tidigare undersökningar. Bilden av en verksamhet som börjar inom, eller med, vallanläggningen Gudings slott har en fortsättning under loppet av senare perioder längs åsen mot söder, åtminstone fram i vendeltid. Det är dock ännu för tidigt att dra helt säkra slutsatser, vilket får vänta tills projektets sista år.

Det andra huvudsyftet var att initiera undersökningar i angränsande och motsvarande miljöer inom de angränsande socknarna Rone och Grötlingbo för att belysa frågan om den bild av historiens förlopp som börjar komma fram i Eke har sin motsvarighet i grannsocknarna. Det vill säga, försöka klara ut huruvida historien i Eke är att se som specifik för just den platsen eller om det i själva verket är ett

förlopp som kan ses som mer eller mindre generellt längs den gotländska kusten under loppet av järnåldern och den tidiga medeltiden.

Mycket tyder på att historien i Eke upprepar sig längs kusten, framför allt utifrån den likartade fornlämningsbild som finns längs hela kuststräckan mellan Grötlingbo socken i väster och Burs socken i öster. Det finns tydliga stråk av vissa kategorier av lämningar, där bronsålderns rösen ligger "högst upp", på en nivå ca 6-7 meter över havet. I en nivå ner mot 4-5 meter över havet finns enstaka gravar och mindre grupper av gravar, spår av äldre huslämningar och på två ställen markanta vallanläggningar, benämnda fornborgar.

Ett särskilt tydligt stråk längs kusten utgör förekommande områden med stenar med sliprännor och slipytor. Dessa återfinns regelmässigt mellan 2-3 meter över havets nivå. En detaljerad analys av ett längre kustparti har visat att det ser likadant ut längs stora delar av södra Gotlands kuster och att dessa lämningar skall dateras till en tid som knyter till en strandnivå som ligger mellan 2



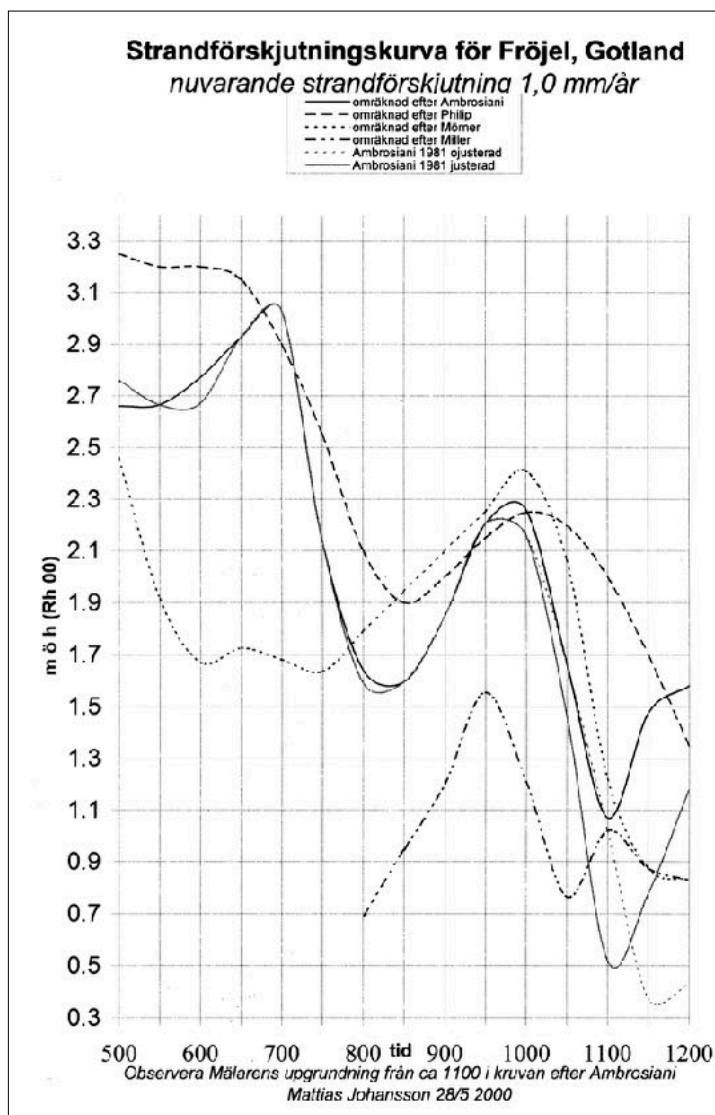
Figur 24. En delsträcka längs kusten av Rone socken, kring Raudstajns fiskeläge, med markering av vattennivån 2 respektive 3 meter över havet kopplat till förekomsten av stenar med sliprännor och slipytor (röda markeringar) och gravar (violettera markeringar).

och 3 meter över dagens strandnivå (se bilaga 6 och 7).

Längst ut mot kusten finns de historiska fiskelägena som kan följas ner i 1600-tal via skrivna källor och i anslutning till dessa finns också fångstanordningar för fiske, vilka till del numera ligger på torra land, på grund av landhöjningen. Hur långt tillbaka dessa fiskelägen kan följas på deras nuvarande platser är oklart, men begränsade undersökningar i bland annat Sundre socken på södra Gotland, antyder att verksamheter på dessa platser finns under medeltid.

Genom att vi har tämligen god kunskap om landhöjningen på Gotland kan man utgående från detta i grova drag datera de skilda typerna av lämningar, under förutsättning att de kan knytas till den dåtida stranden. I fråga om stenar med slipyor och sliprännor är det uppenbart att det krävs vatten för arbetet, liksom att fiskelägen, fiskeanordningar knyter direkt till vatten, medan gravar inte kan sägas ha denna knytning per automatik. Men gravarnas höjd över havet ger en bakre gräns för deras tillkomst, det vill säga, de kan inte vara äldre än när havet stod vid foten av konstruktionen.

Ett generellt problem med frågan om landhöjningen är att den inte har varit linjär, det vill säga att landet har höjt sig stadigt genom tiderna i en oförändrad hastighet. Det mesta tyder på att det har varit både vattenståndssänkningar och -höjningar, särskilt tydligt i tidsintervallet 1000/1100-tal. Sett i ett längre perspektiv kan man dock för södra Gotland räkna med en landhöjning under de senaste årtusendena på ca 2-2,5 meter på 1000 år, troligen något mer på norra Gotland och mindre längst i söder. Dessa generella uppgifter ger oss i vilket fall som helst en vägledning till tolkningen såväl av daterade anläggningars läge till dåtidens hav, som uppskattad ålder på lämningar som bör knytas till den forntida stranden.



Figur 25. Ett antal uträkningar av strandnivåerna överförda till gotländska förhållanden.

Bilden börjar klarna

Tyngdpunkten i den gångna sommarens arkeologiska undersökningar inom ramen för projektet kom att koncentreras till Eke socken och då inom ett långsmalt stråk av lämningar från vallanläggningen Gudings slott och mot havet. På den svaga ås som finns här finns ett stort antal lämningar i form av diffusa husgrunder, troliga gravar och oklara stenhögar, liksom även stenrader längs kanten av åsen avgränsande lågt liggande områden och närmast stenfria i öster.

Totalt längs denna ås kom vi att undersöka tre husgrunder, tre mer oprecisa anläggningar där

två tolkades som delar av gravar och en var av oklar till funktion. Därutöver delundersöktes och rensades fram en tydlig terrasskant mellan den bebyggda åsen och det lågt liggande området öster om, som av allt att döma är rensat från sten och möjligt att lägga till med båtar.

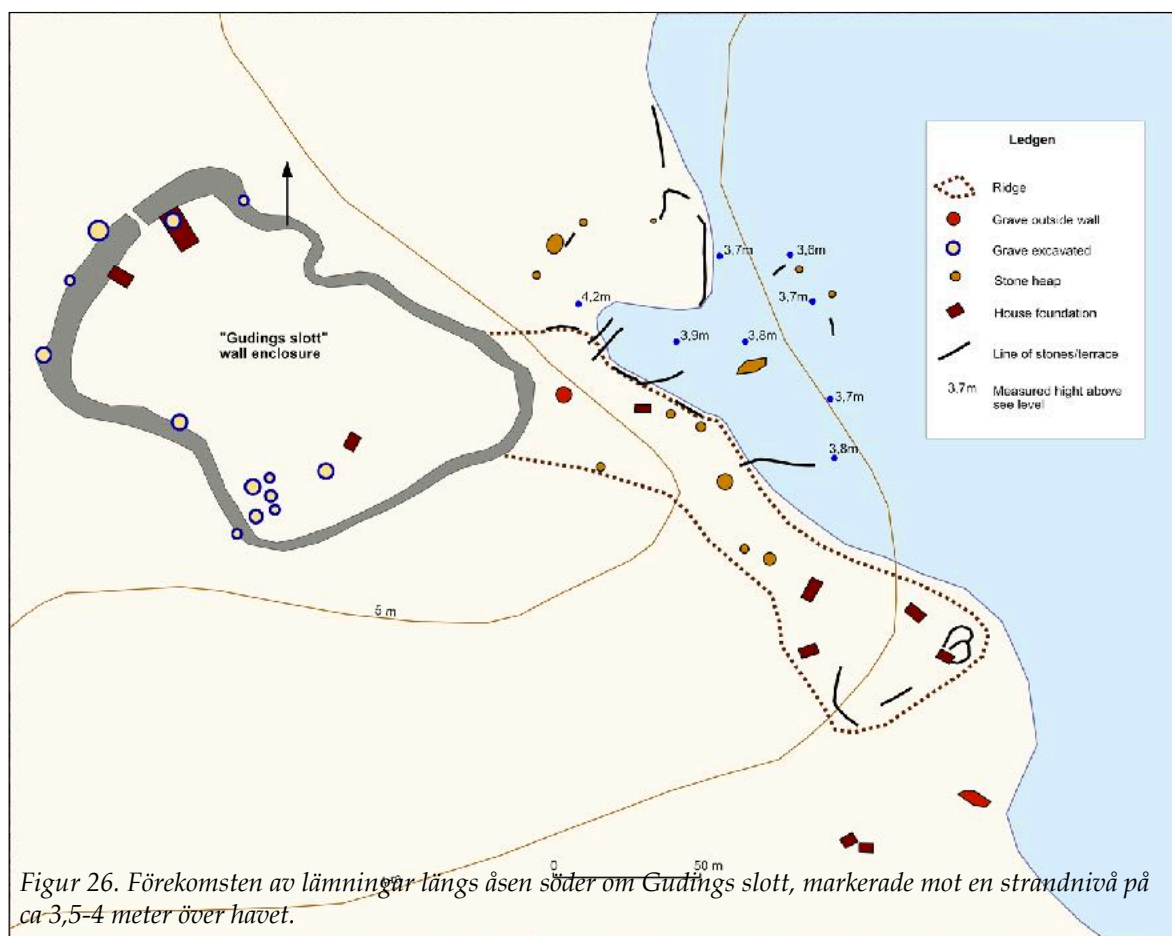
Dateringarna av undersöka lämningar sträcker sig från tidig romersk järnålder upp i vendeltid, med en tydlig koncentration till perioden folkvandringstid-tidig vendeltid.

Den rumsliga bilden, kopplat till de dateringar av anläggningar som finns, indikerar en historia av en kustaktivitet som börjar med området inom vallanläggningen Gudings slott (som ligger på en höjd av ca 5-6 meter över havet) under perioden sen bronsålder - tidig järnålder, som förflyttas, i takt med att havet drar sig undan, söderut längs åsen under romersk järnålder, för att under loppet av den yngre järnåldern (från 700-talet), etableras

antingen inom området där Djaupkrog fiskeläge ligger i historisk tid, eller så utgör fortsättningen på historien de lämningar som undersökts från 7- 800-tal längre västerut, i anslutning till marker som hör till By gård och Bybod.

De begränsade undersökningar som företagits inom Rone och Grötlingbo kan inte ännu säkert klarlägga att situationen är densamma inom dessa platser, men mycket talar för att så är fallet. Den zonerings av fornlämningarna som syns i Eke, har i hög grad sin motsvarighet i grannsocknarna, inte minst tydligt uttryckt i fallet Rone.

Här finns en markant stenvall som inhägnar ett välavgränsat område med talrika spår av motsvarande karaktär som inom åsen söder om Gudings lott. Endast några 100 meter längre mot söder mot havet finns fiskeläget Raudstajn som kan följas historiskt ner till 1600-talet, men som säkerligen har ett äldre



ursprung och som av allt att döma är en direkt fortsättning på den äldre historia som skymtar i markerna längre in i land i form av husgrunder, stenvallar, gropar, stenhögar etc (se figur 18).

Det centrala i dessa kronologiska kedjor är den förmodade direkta och viktiga knytningen direkt till havet. Vi har här uppenbarligen aktiviteter som framför allt knyter till jakt och fiske vid kusten och genom historien har alltid kustanknutna aktiviteter legat direkt vid stranden. Man kan notera att dagens fiskelägen i området ligger ca 1 meter över havet. Man skulle med andra ord kunna vända på situationen och säga att de husgrunder vi undersökt markerar en vattenlinje ca 1 meter lägre än där husgrunderna är belägna.

Det ger oss onekligen en god möjlighet att såväl bedöma strandens läge utifrån daterade lämningar som att datera lämningar i sig utifrån nivån över havet. Det finns här en rejäl chans att få en god bild av vattenståndslinjen under loppet av perioden sen bronsålder till tidig medeltid, självklart inom vissa felmarginaler.

Skulle vara intressant att göra en form av tabell, statistik sammanställning av värden vi har för skilda anläggningar.

Fortsättningen

Som en avstamp inför kommande års fortsatta arkeologiska undersökningar får figur x över kuststräckan och kopplingen mellan gårdarna och stranden, såväl den förhistoriska som den sentida, tjäna som en utgångspunkt.

Undersökningarna hittills har, i fallet Eke och området vid Gudings slott, gett en tämligen tydlig bild av en kustaktivitet som är starkt knutet till själva strandzonen, vilket inneburit att aktiviteterna flyttas mot kusten allteftersom havets nivå sjunker. Detaljerna är dock ännu till del oklara. Som exempel kan nämnas att det inte är helt klarlagt hur verksamheterna vid Gudings slott skall kopplas till

aktiviteterna längre mot väster, i anslutning till Bybod. Det finns här två huvudalternativ, där det ena är att det är två separata linjer av utveckling och det andra att verksamheten söder om vallanläggningen Gudings slott upphör vid 600-talet för att fortsätta från denna tid i området vid Bybod, något som kan ses som fullt möjligt utifrån de dateringar som finns.

Även om vi har förhållandevis god kontroll på funktion och datering av anläggningar såväl inom som söder om vallanläggningen Gudings slott saknar vi ännu övertygande belägg för när själva vallanläggningen är anlagd. Innanför vallen finns dateringar från perioden 800-500 BC, även en härd från tiden omkring år 0, som indikerar någon form av verksamhet inom denna tidsram. Det är dock, som sagts, oklart om dessa dateringar direkt kan sättas i samband med konstruktionen av själva vallanläggningen.

För att få ett möjlighet att klarlägga vallens såväl datering som konstruktion och funktion är målet att under 2022 genomföra två, ytmässigt stora, genombrott av vallen i norra delen, där den är som bredast, med syftet att få svar på ställda frågor.

Under 2022 är också avsikten att fördjupa kunskapen om frågan om ett generellt förlopp längs den gotländska kusten genom att genomföra kompletterande arkeologiska undersökningar i Grötlingbo, vid lokalen med en motsvarande vallanläggning som Gudings slott.

Projektet kommer därefter att avslutas under sommaren 2023 genom att förlägga hela grävsäsongen till den under den gångna sommaren påbörjade undersökningsområdet i Rone socken. Till detta skall också läggas att hela kuststräckan avses ominventeras för att erhålla en så komplett bild som möjligt av förekomsten av skilda anläggningar, då dagens registrerade lämningar inte speglar verkligheten.

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Administrativa uppgifter

Undersökare: Arendus AB
Länsstyrelsens diarienummer: 431-692-2020
Typ av undersökning: Arkeologisk forskningsundersökning
Utförandetid fältinsats: 22 juni-17 juli 2020
Län: Gotland
Kommun: Gotland
Socken: Eke
Fastighet: Smiss 2:1, By 1:1
RAÄ-nummer: Eke 95:1, 98:1, 99:2 och 5, 100:1-3.

Projektledare: Doc. Dan Carlsson
Rapportansvarig: Dan Carlsson och Fanny Bengtsson
Koordinatsystem: SWEREF 99TM
Mätutrustning: Totalstation, handhållen GPS

Fynd tillvaratagna och konserverade som skall fyndfördelas.

Trench and construction descriptions

I det följande görs en detaljerad beskrivning och redovisning av samtliga undersökta anläggningar under fältsäsongen 2021, upplagda på de lämningar som har berörts inom socknarna Grötlingbo, Rone och Eke. Tyngdpunkten i årets undersökningar har legat på Eke socken, med begränsade provundersökningar inom Rone och

Rone socken

Inom Rone socken undersöktes lämningen L1975:1157, tidigare upptagen som grav, men under 2021 reviderad till husgrund i fornminnesregistret. Husgrunden är belägen i norra delen av ett område med talrika lämningar från en kustbunden

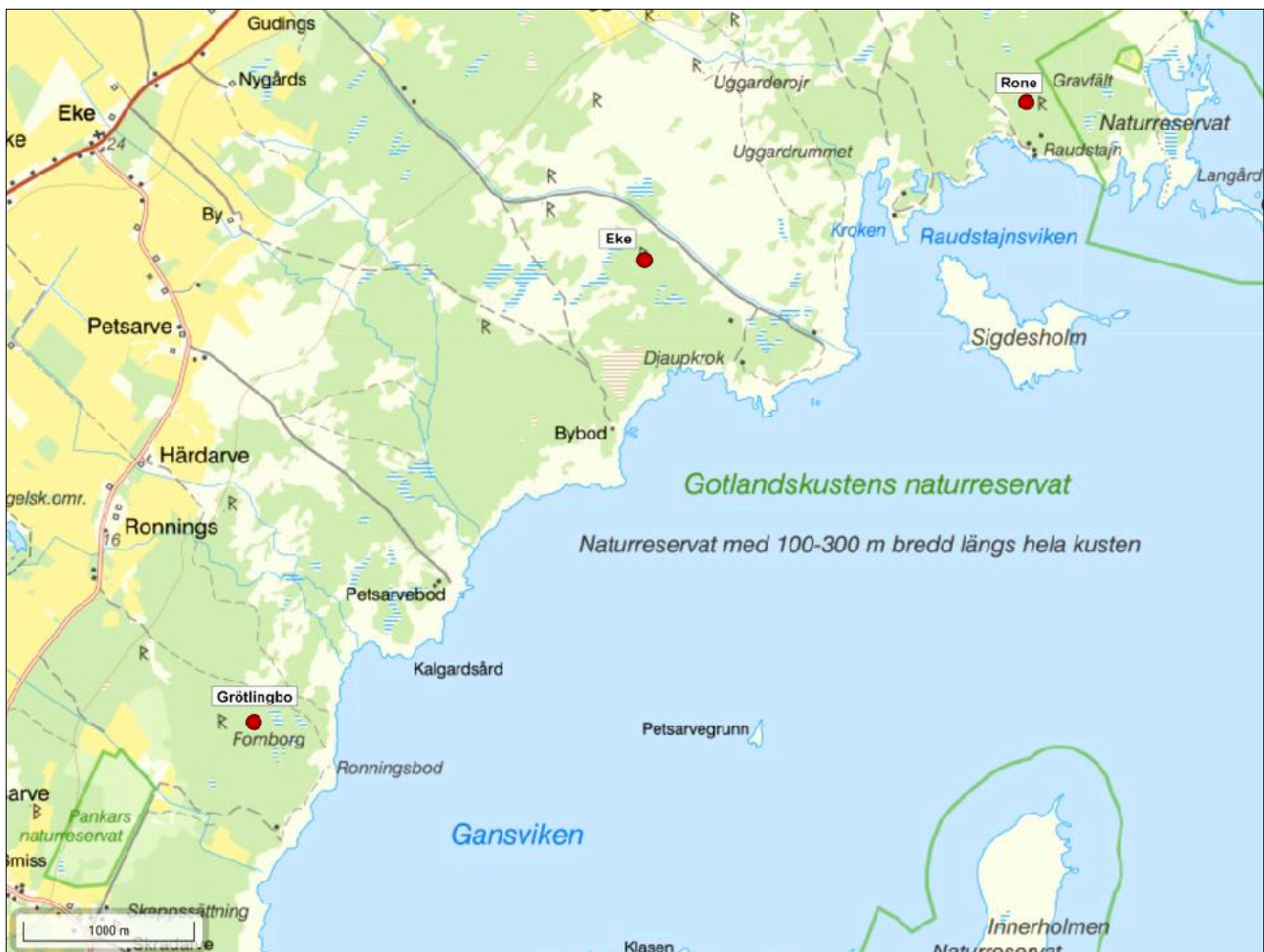


Figure 27. Excavations during 2021 has Benn carried out at three different locations.

Grötlingbo socknar som har berörts under årets undersökningar. Undersökningarna i Rone och Grötlingbo begränsades till en fornlämning på vardera stället, i Rone socken en husgrund, tidigare tolkad som en grav, och i Grötlingbo socken en förmodad grav.

verksamhet under förhistorisk tid i form av husgrunder, tomtningar, stenar med slipskåror, stenvallar och gravar.

Grötlingbo socken

Inom Grötlingbo socken kom att undersökas en fornlämning upptagen som grav i fornminnesregistret (L1975:750), belägen inom ett mycket

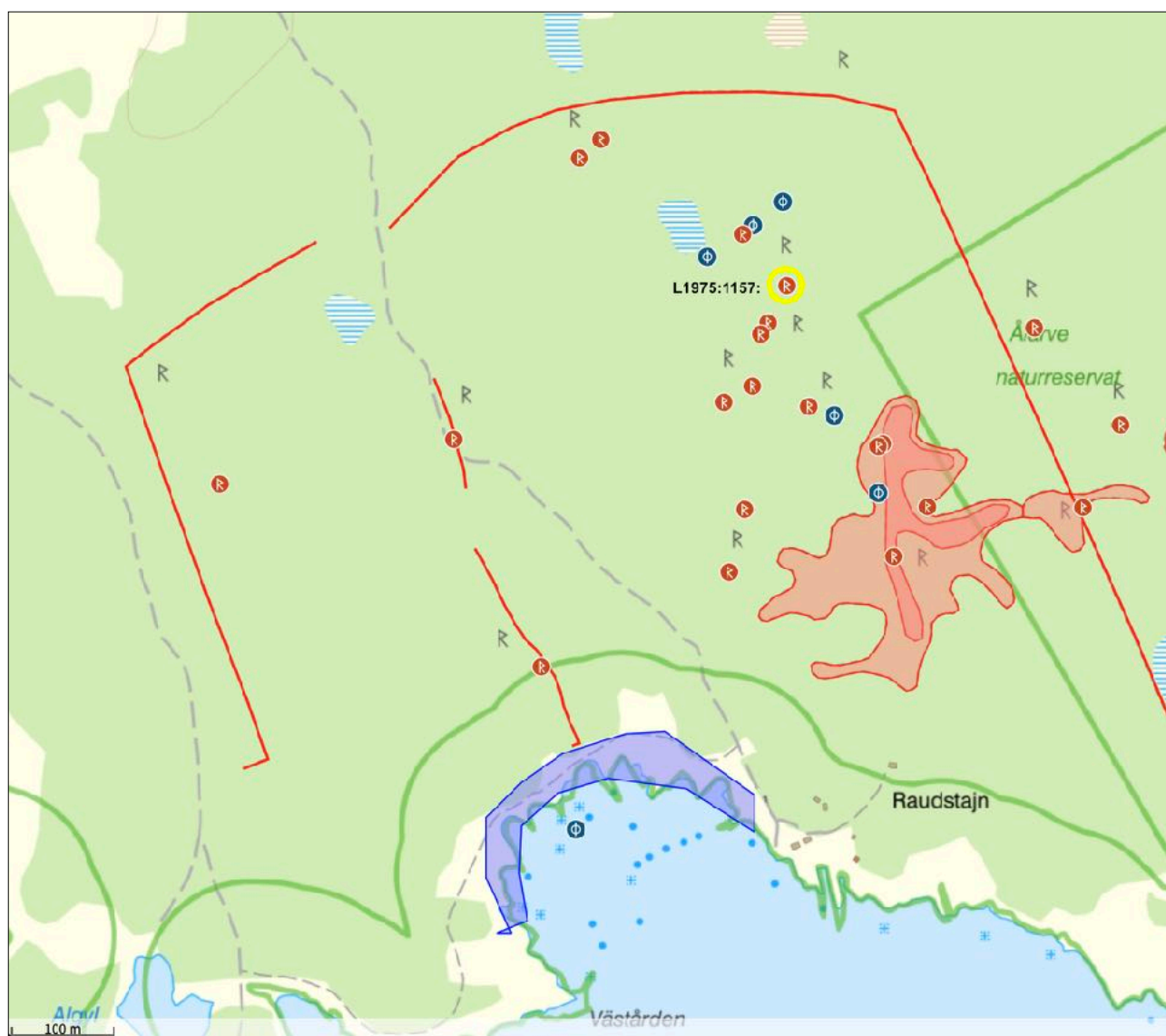


Figure 28. Excavated construction in Rone parish.

komplext område med gravar, stenar med slipskåror och slipytor, stenvallar och i närheten av en vallanläggning (fornborg) av samma karaktär som i Eke (Gudings slott). Kartan på följande sida illustrerar miljön i Grötlingbo. Fornlämningsbilden vid Ronnings i Grötlingbo socken påminner starkt om förhållandena vid Gudings slott, med förekomst av såväl en vallanläggning som gravar, husliknande lämningar och diffusa stenhögar.

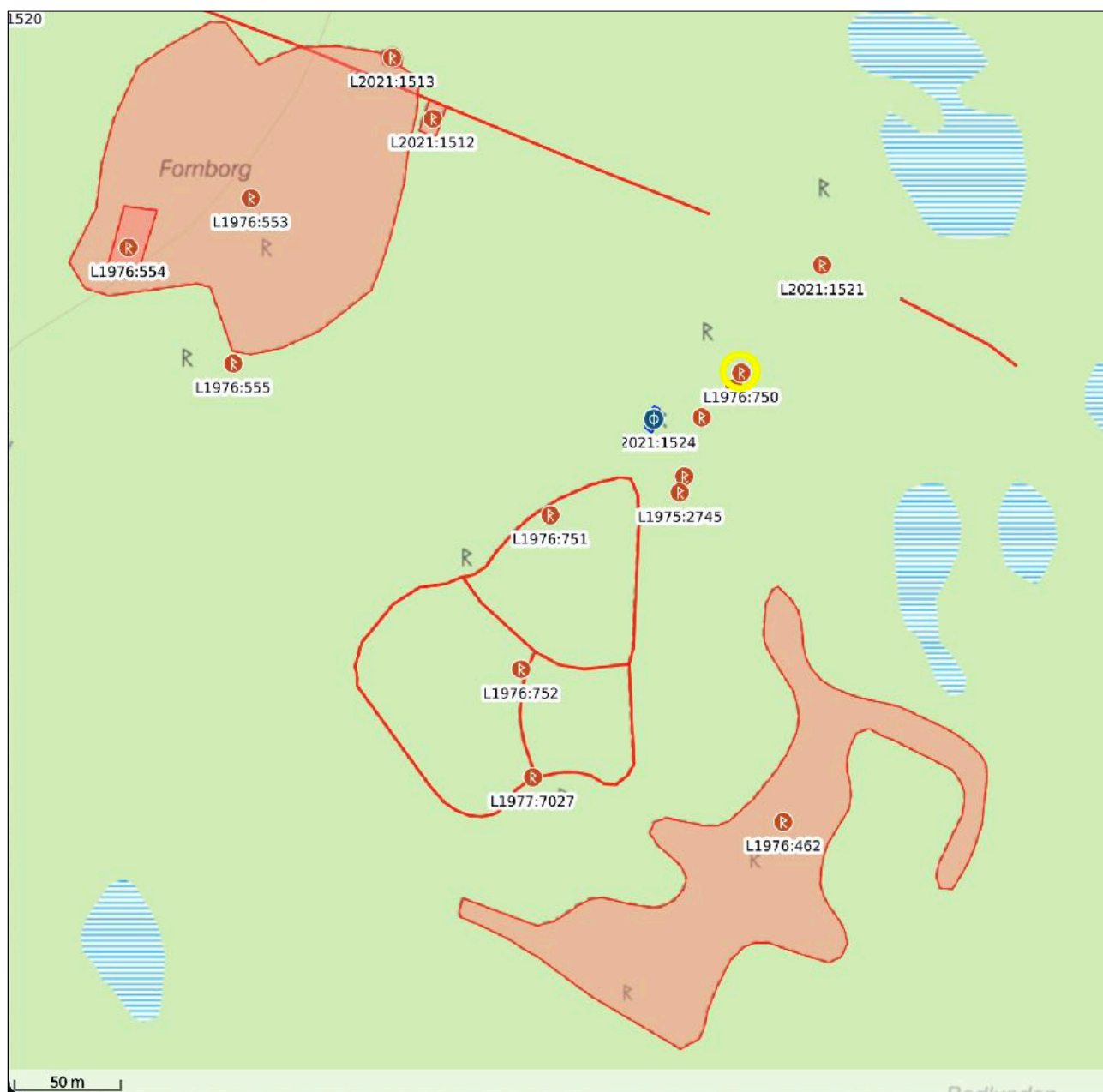
Eke socken

De mest omfattande undersökningarna under årets fältsäsong handlade om att fördjupa kunskapen om miljön kring vallanläggningen Gudings slott och framför allt då de lämningar som finns längs med en ca 300 meter lång, svag ås som sträcker sig från Gudings slott och söderut mot det sentida fiskeläget Djaupkrok. Det rör sig om såväl möjliga

gravar som husgrunder, stenvallar och mindre stenhögar av oklar funktion (L2021:1494).

Därtill kom begränsade undersökningar att genomföras inom vallanläggningen Gudings slott (L1977:4059). Dels undersöktes en grav och därtill en förmodad grav inom gravfältet L1977:4153, med syftet att fördjupa kunskapen om de gravlagda. Inom norra delen av vallanläggningen kom en husliknande lämning att undersökas (L2021:1495).

Slutligen, ca 300 meter väster om vallanläggningen Gudings slott finns på en tydlig ås i landskapet en mindrestenssamling som tolkats som möjlig grav. Denna kom också att undersökas (L2021:1493). Karta över undersökta lämningar i Eke socken på följande sida. Sammanställningen över



Figur 29. Excavated monument in Grötlingbo parish

anläggningarna är gjord av Alice Rosa Brusin,
Cherie Jeanette Larkin and Anna Sointula.

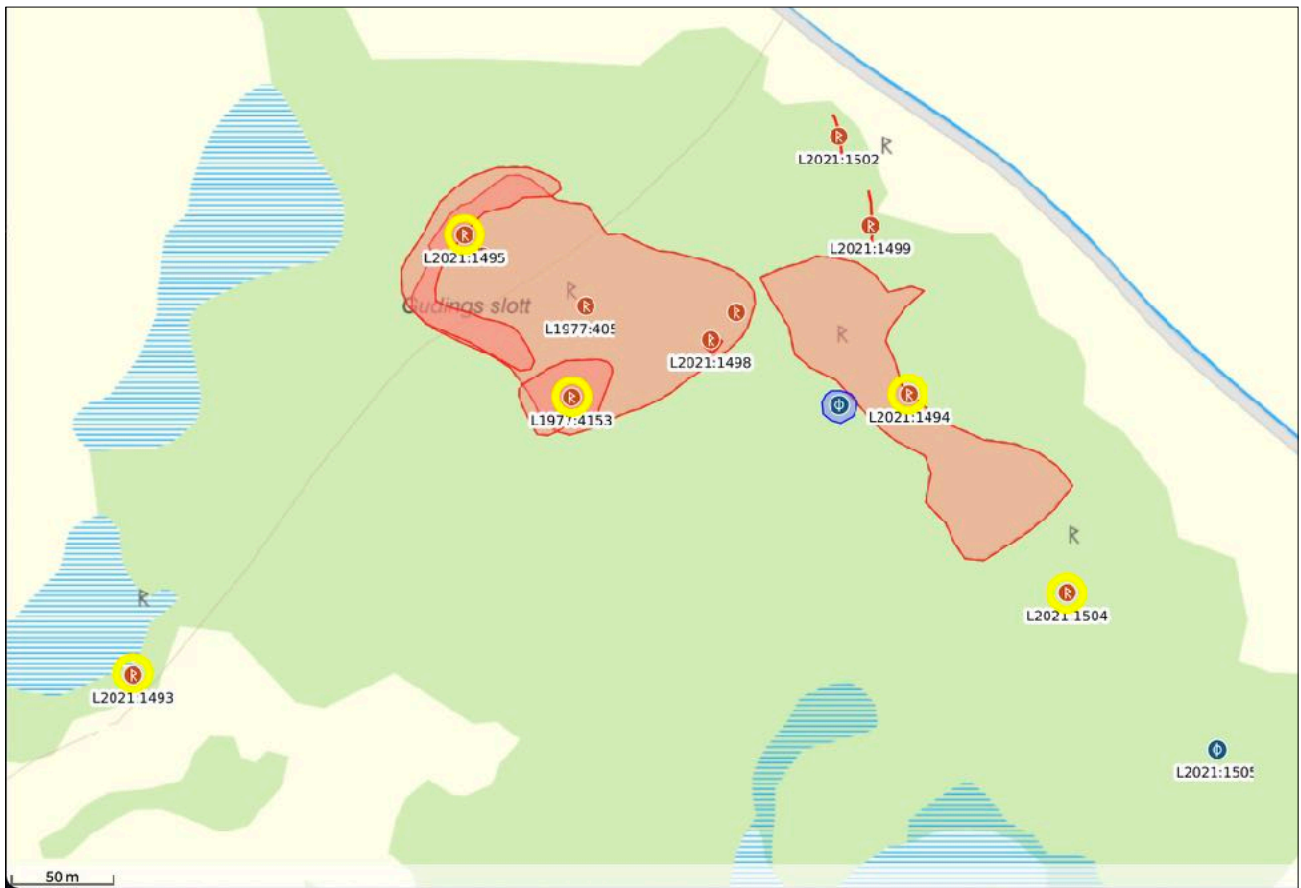


Figure 30. Investigated monuments, fully or partly, in Eke parish, marked with a yellow circle.

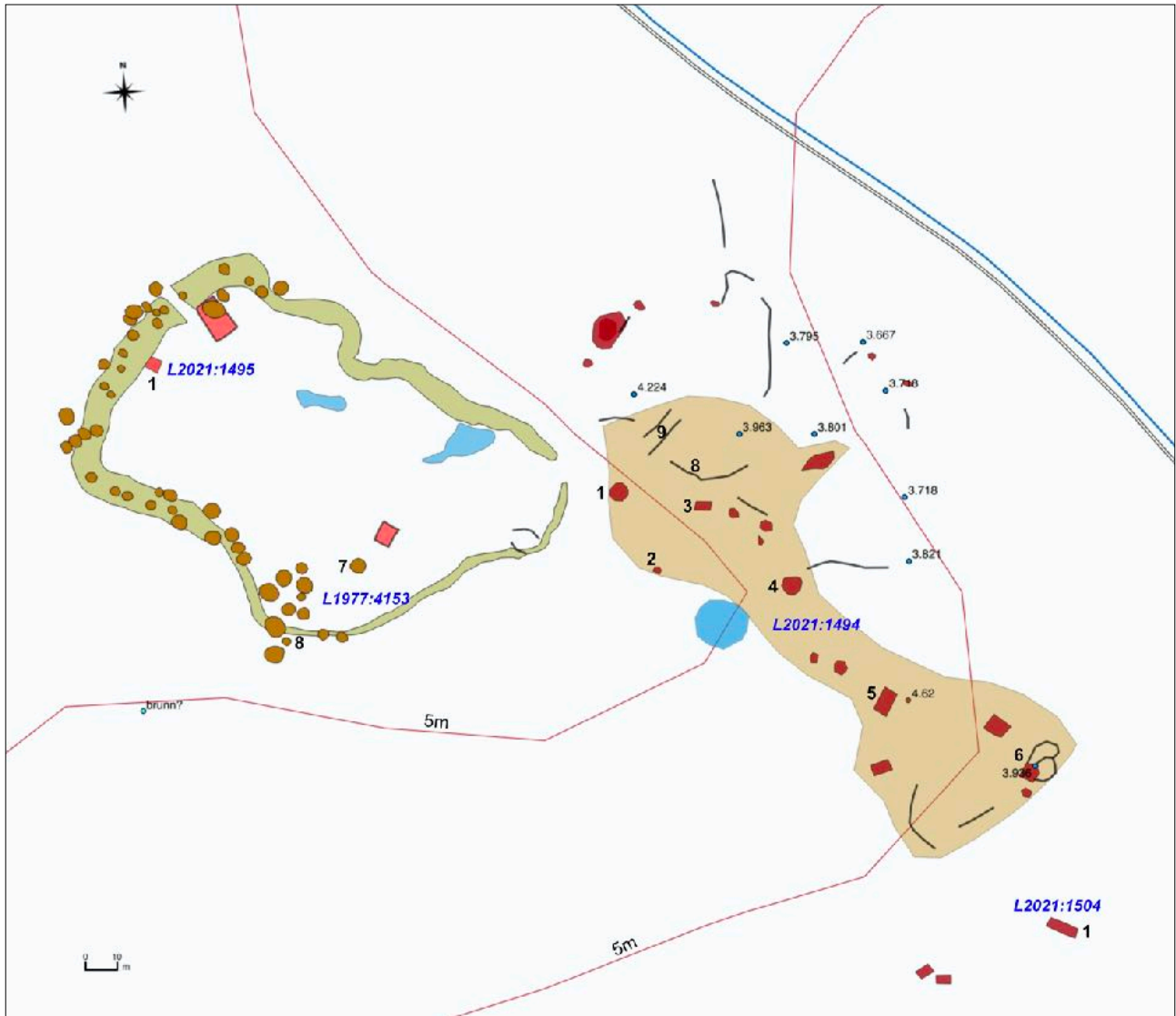


Figure 31. Excavated constructions inside L2021:1494, L2021:1504, L2021:1495 and L1977:4153, marked with numbers that refer to the following descriptions of investigated constructions. In the figure in the eastern part is also measures of the hight today above see level, meaning between 3,5 and 4 meters.

Ancient monument, Rone parish, L1975:1157

Construction no.	1
Coordinates	SWEREF 99TM, N 6341601, E 709671
Type	House construction
Size	10m x 5.3m (NE-SW)
Form	Rectangular
Above sea level	
Situation	The construction is situated in the northern part of a complex prehistoric environment, on a small ridge going in NE-SW direction
Analyses	¹⁴ C-dating of cow tooth; BP 1178±33, AD 774-974 2 sigma

Description:

The house is located in a relatively open pasture. The facility measures 7 x 8 m. A robust shell wall around the whole house is relatively clear. The kerbstones that form the outside of the wall are ca. 0.2-0.4 m and the inside of the wall has a filling of smaller stones. The width of the wall varies between 0.9-1.1 m. The northern and southern walls are rounded with the northern wall extending past the boundary of the trench.

The surface is covered with turf and vegetation. The visible stones vary in size from 0.2-0.5 m. To the north of the boundary, in the middle of the short side, there are two large stones, approximately 0.6 x 0.8 m, with a height of about 0.6 m. Near the boundary to the East is a small stone packing of indefinite type. In the south-west corner there are 3 stumps, probably pine, in the shell wall. The whole facility is located at a slight height and slopes slightly from north to south.

Exposure of the facility's shell wall

After de-turfing the shell wall, the stones in the wall are exposed. Height measurements are taken on some of the stones. Not far down, loose stones and gravel appear approximately in the middle of the north-east wall. There is a possible entrance in the south-west wall (see figures 32 & 34. In the shell wall, the surface is covered with dark soil that turns into sand after about 10 cm. In the south-west, the soil layer is approximately 1 cm thick, followed by gravel.

Enlargement

An extension of 3 x 6 m is made in the north-east direction. In the extension there is a collection of stones, about 5 meters long running in an east-west direction and 2.5 m in a north-south direction. This seems to be a continuation of the shell wall. Adjacent to the north side

of the shell wall is another stone packing. The total length of the house is 10.50 m, the inner width is 2.90 m and the outer width is 5.30 m.

Exposure of the middle part of the facility inside the shell wall

There are stones over almost the entire surface from about 0.8 m x 0.1 m and larger. There are fewer stones in the centre of the facility. In the north-east sandy soil appears just under the turf and after about 5 cm there is coarse sand, pebbles and gravel. There are no colour changes. About 2 meters in from the south-west wall is a row of stones perpendicular to the shell wall. A possible opening in the row of stones is furthest to the west. In the opening there are several thin stone slabs, possibly slate, that are ca. 0.05 m x 0.08 m–0.1 m x 0.15 m. Could this possibly be the remains of a floor or collapsed ceiling? There are small flint shards and crumbs of clay. In layers 2 and 3, two flint fragments (F36) are found. In the north-east corner there is sand just under the turf. There are occasional occurrences of thin sandstone slabs.

In the northern part of the facility there is a crescent-shaped stone packing adjacent to the shell wall (see figure 36). The stones are removed after top and bottom measurements have been taken on several stones. Under the stone packing there is a new stone packing of approximately the same distribution. In the same location as layer 2 there is a presence of possibly clay or sandstone. Within the same area furthest to the north-east, there is a third layer of rock in layer 3, slightly sparser than the previous ones. There are few finds except for small pieces of clay and quartz. Then there is a layer of sand.

Interpretation:

The facility was previously listed as a grave in the antiquities register but was re-registered in 2021 as a house foundation. The study shows that it is a form of house construction consisting of walls of a shell-wall character. No clear entrance could be noted, nor any traces of construction details, such as post holes, a hearth or the like. No finds or occurrences of charcoal that can with certainty be linked to the facility were found. The find of a cow's tooth (F35), most likely belong to the facility while it was found in connection to the stone wall. The absence of dateable material that can be associated with the facility makes dating the facility difficult. However, the facility shows great similarities with the investigated remains in Eke parish that correspond to remains of the 'tomtning' type and will most likely be dated to the Iron Age, possibly the Early Iron Age. A carbon 14-sample gave the dating AD 774-974.

Find Material:

Find no.	Description
35	Tooth of a cow
36	Flint

Plans and photos:



Figure 32. Oblique photo of facility L1975:1157 before de-turfing. The rectangular shape of a structure with a clear shell wall can be seen through the turf.



Figure 33. Oblique photo of facility L1975:1157 after de-turfing. A possible entrance can be seen in the south-west section of the wall.



Figure 34. Detail of the northern shell wall of facility L1975:1157.

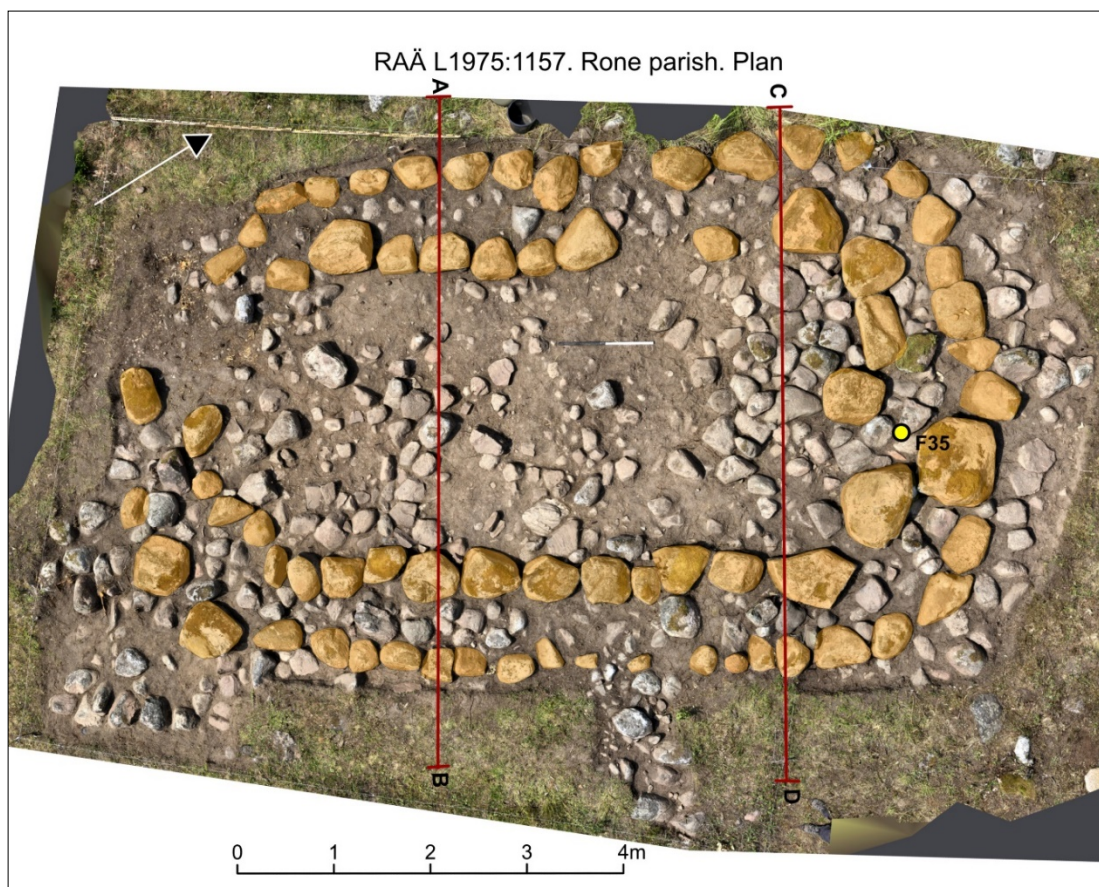


Figure 35. Vertical plan of facility L1975:1157. The outer stones of the shell wall are highlighted in orange. A tooth of a cow was found in the northern wall (F35).

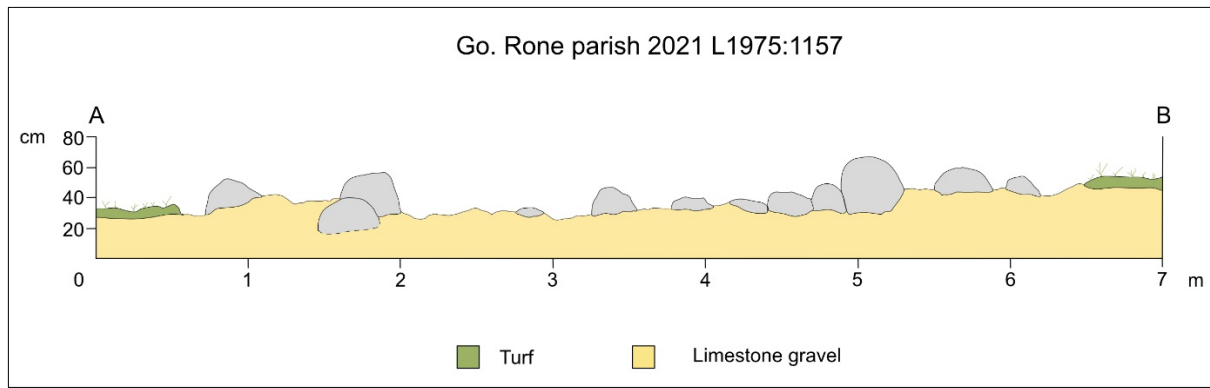


Figure 36. Profile of facility L1975:1157 oriented towards the north.



Figure 37. Photo of profile of the eastern wall of facility L1975:1157.

Ancient monument, Grötlingbo parish, L1976:750

Construction no.	1
Coordinates	SWEREF 99TM, N 6337651, E 705237
Type	Stone setting
Size	6m x 4m (N-S)
Form	Oval
Above sea level	
Situation	On a small height in a wooden landscape
Analyses	C14- sample taken of a cow tooth. Failed because of bad quality of the bone

Description:

Before de-turfing and investigation, the facility appears as an almost oval shaped turf-covered stone packing. The facility is ca. 6 x 4 m in size and is approximately 20 cm above the surrounding surface. The surface is covered with scattered oak and birch stump shoots and stones that are ca. 0.3–0.6 m. Single larger stones measure ca. 0.5–0.8 m. In the facility, a pine stump as well as another single stump is visible.

Layer I

After de-turfing, the stone packing becomes clear. The packing consists of stones of various sizes. At the pine stump in the south, the soil quickly changes character. After a layer of bark and chips there is sand-mixed soil and gravel. Over the entire surface, patches of sand or sandy soil appear just under the turf. The facility contains many roots and smaller stumps. The visible stones are of varied sizes from ca. 0.1 x 0.2 m to 0.3 x 0.6 m.

A number of smaller birch and oak stumps are removed. In the south there is sandy loam and sterile sand. In the north there is first a thicker layer of oily soil then slightly further down there is loam. There is no significant colour change. A relatively circular setting of stones with a diameter of just over 2 meters is centrally located in the facility and includes slightly larger stones. An elongated stone-surrounded formation of a grave-like character can be seen in the north-east corner.

Layer II

The soil is cleared away throughout the facility and stones are removed from the centre of the facility. In the south there is sand, clay and gravel. In the north there is loam and a clear

stone packing of smaller stones that is about 10 x 10 cm. There is no significant colour change. A tooth, probably from a cow, was found on the eastern side of the stone packing.

Layer III

Top measurements are taken in layer 3 and there is continued cleaning of soil, sand, clay, and gravel as well as the removal of stones in the centre of the facility. There is no significant colour change in the soil.

Layer IV

Top measurements are taken in layer 4 and there is further removal of stones in the centre of the facility. Further excavation goes through a mixture of pebbles, soil and sand into clay. After a few centimetres, oily, compact, blue-toned clay is found over the entire surface, which is also unusually moist (see figure 41). The clay layer is about 20 cm below the ground surface. Two test pits in the facility show that the clay extends at least a further 12 cm down.

A test pit about 5 meters outside the facility shows the presence of similar clay layers there as well. This is interpreted as meaning that the clay layer is natural. There are no further findings or significant colour changes in the soil.

Interpretation:

The construction consists of a slightly irregularly rounded stone packing without a clear demarcation. There is no tendency for an edge chain or other structural details that could be associated with a grave, nor are there any bones, whether burnt or unburnt, other than the probably sentient vertebra. In other words, the facility cannot be interpreted as a grave, however, its actual function is unclear.

Find Material:

Find No:	Description
37	Pieces of a tooth, probably cow. Could not be dated by 14C analyses due to badly preserved bone.



Figure 38. Oblique photo of facility L1976:750 before de-turfing. An oval-shaped stone packing can be seen through the turf.



Figure 39. Oblique photo of facility L1976:750 after de-turfing.

Planes and photos:

Go. Grötlingbo parish. L1976:750. Plan after de-turfing and cleaning.



Figure 40. Vertical plan of facility L1976:750. A circular stone chain is highlighted in orange. A cow's tooth (F37) was found on the east side of the stone setting.

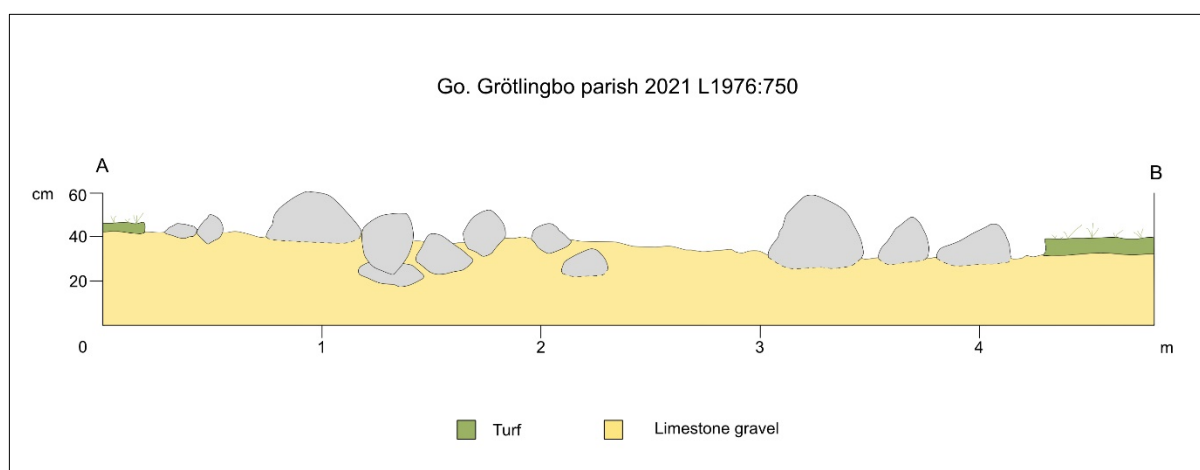


Figure 41. Profile of facility L1976:750 oriented towards the north.



Figure 42. Oblique photo of facility L1976:750. The central stone packing inside the edge chain is shown excavated down to a level where clay is encountered.

Ancient monument, Eke parish, L1977:4153

Construction no.	7
Coordinates	
Type	Grave
Size	5m x 5m
Form	Round
Situation	
Analyses	Bones for C14 dating, 2 teeth for isotope analysis, textile for analysis, soil sample from the stomach area of human skeleton from construction 7:2. The C14 dating of the central grave BP 899±29, calibrated to AD 1044-1218. The dating of the skeleton from 7:1 was BP 327±37, calibrated to AD 1475-1644.

Description:

Before de-turfing, the facility appears as a large stone packing in the form of a roughly circular mound. There is a clear depression in the middle where the remains of a tree stump are located. The stones appear to have been displaced from this depression and the mound is higher on the north and north-west sides, possibly built up from stones that had previously filled the center of the mound. Most of the stones are loosely laid on the mound and vary in size and type. The rocks are mainly covered in moss and lichen and soil fills the spaces in between where plants grow. Another tree stump is located in the south-west section of the mound and a small somewhat circular formation of small stones is located in the south-west corner.

Layer I

After de-turfing and cleaning of the stones, there appeared to be a possible original stone border on the north-west corner of the grave. The height of the highest stone, although likely displaced, was approx. 0.4-0.6 m. The stones range in size from 0.1-0.5 m, but are mainly 0.2-0.3 m. The depression in the middle is a 1.2 m wide hole that is approximately 0.2 m deep. The north-west corner has the largest number of displaced stones. On the east side of the mound, a fallen tree has broken up and disturbed the stones.

Layer II

Loose stones of varying sizes (0.05 m-0.5 m) were removed from the setting. Underneath the stones more stones and dark brown turf with roots were discovered. The turf and soil around the stones were cleaned while removing some remaining loose stones. The setting remains in a circular shape, although without any visible formations or structures formed by the larger stones. Larger stones, however, tend to be situated close to the outer edges of the setting. A small depression with darkened soil in the center of the stone packing can still be detected.

Layer III

More loose stones were removed from the surface. Stones that were determined to possibly be in their original location and would have formed an edge chain around the grave were left in place. Loose soil was removed from the facility with special attention to the central area of the facility within a circular area of stones located within the larger outer stone chain. The soil within this area appeared darker and of a different texture from the surrounding area which was a lighter shade of brown. The central stone packing consisted of smaller stones including some stones that were placed upright. During the cleaning of this stone packing small fragments (1–5 cm) of coarse dark grey ceramics were found in the southern corner. Just to the west, a small whetstone with a hole on one side, possibly for suspension, and human skeletal remains were found. The skeleton consisted of cranium fragments along with 9 teeth which were located 18 cm west of the long bone fragment which lay oriented east to west. The bones lay directly on stone. After excavating the area around the bones, no other skeletal remains were found. The bones were removed and the area underneath was excavated but no further remains were found. The ceramic fragments may be associated with the remains of the cranium and long bone since they were located on the same level and approximately 18 cm south of the long bone.

After further excavation of the center of the facility where the soil appeared darker, soil and a layer of small to medium sized stones were removed and human skeletal remains were uncovered. First appeared part of an arm bone consisting of the radius and ulna which were broken. On the southern side of the grave the cranium, including the mandible and a tooth, were then uncovered. The cranium was at a higher elevation than the arm bone and was laying on its right side, facing to the east. The cranium was heavily fractured and laying directly on several small rocks. A medium sized stone was located between the arm bone and cranium. A portion of what appears to be a pennanular brooch was uncovered just below and to the right of the cranium. This type of brooch would indicate the individual as a male from the Viking Period.

As more soil and rocks were removed, the entire skeleton became visible. The feet were on the northern side of the grave and at a slightly lower elevation than the cranium. The legs were slightly bent and lay with the knees facing to the east. The entire skeleton was heavily fractured. Only one tooth was found still in the mandible, 9 teeth were found in the vicinity of the cranium while one tooth was near the left humerus. Bones from the hand and wrist were found scattered around the pelvis and legs. The feet appeared to be flexed upward, possibly resulting from the decomposition process. Bones from the feet were found scattered around the lower legs. The estimated length of the skeleton is approximately 176 cm based on the length of the left femur (48 cm) and the left tibia (42 cm). The pennanular brooch was removed with possible textile remains and part of the scapula attached. A belt buckle with attached textile and leather was found above the pelvis, across the lower vertebrae, and removed. Both the belt buckle and pennanular brooch were bagged and kept in the freezer to help with preservation of the possible textile remains. A small (12.5 cm) iron knife was found below the left arm, after the removal of the left os coxae. A bronze object, which may be part of a sheath for a knife, was also found near the left arm. A dark circular area, approximately 3.8 cm in radius, was observed after removal of the left arm bones. The remains of an unidentified material, possibly organic, appeared to form a cylinder with soil

in the center. The object is, as yet, unidentified. A sample of soil from the stomach area was collected. The entire skeleton was removed starting from the cranium working down to the feet.

Soil from the bottom of the central grave (7:2) was collected and sieved to find remaining bone fragments. Level 3 where the first skeletal remains (7:1) and ceramics were found was excavated further to determine if more remains could be found. Nothing else was uncovered. A section of the west corner, where some possible dark soil was located, was also excavated but nothing was found. The excavated soil and stones were returned to the grave to form a circular mound.

Interpretation:

As a result of the excavation the construction was determined to be a grave. A full skeleton was found in the center of the stone packing, construction 7:2. The skeleton from construction 7:2 has been determined to be a male from the Viking Age based on the grave goods (pennanular brooch), the orientation of the grave (north-south), and the preliminary osteological analysis. Small bird bones were found in the soil in and around the cranium of the individual in 7:2. The bone fragments from the adjacent construction 7:1 can archaeological be dated to a later time than the skeleton from construction 7:2, based on the fact that they were found from a higher layer, and along the side of the facility. The bone fragments found from the construction 7:1 consist only of a partial cranium and a fragmented long bone (possibly from the arm), which indicates that the grave of that individual was destroyed. The bone fragments from construction 7:1 were not sufficient to determine the sex of the individual. The existence of these bone fragments from construction 7:1, as well as the dark soil in other parts of the facility, could indicate that the facility has been functioning as a grave to more than one person.

Find Material:

Find no:	Description
1	Ceramic fragments
2	Whetstone
3	Sheep's tooth
4	Pennanular Brooch
5	Belt Buckle
6	Textile fragments
7	Bronze object, possibly part of a sheath with leather attached
8	Knife, iron
9	Unknown, possible leather of sheath or organic material
B1	Bone (cranium & long bone) 7:1
B2	Bone (full skeleton) 7:2

Find no:	Description
B3	5 small bird bones, 1 fish vertebra

Sample no:	Type
1	Soil sample from stomach area of skeleton from construction 7:2
2	Bone from construction 7:2 submitted for C14 dating
3	Bone from construction 7:1 submitted for C14 dating
4	Tooth from construction 7:1 for isotope analysis
5	Tooth from construction 7:2 for isotope analysis
6	Textile fragments

Illustrations:



Figure 43. Oblique photo of facility L1977:4153, construction 7, after de-turfing. Picture taken toward the east.

Go. Eke 2021. L1977:4153. Construction 7.
After de-turfing and cleaning



Figure 44. Vertical photo of facility L1977:4153, construction 7, after de-turfing. A clear depression can be seen in the center of the stone packing, and without stones..

Go. Eke sn. 2021. L1977:4153. Anl. 7. Layer II



Figure 45. Vertical photo of facility L1977:4153, construction 7, layer II. A possible stone chain is highlighted in orange.

Go. Eke parish. 2021. L1977:4153. Con. 7, layer III

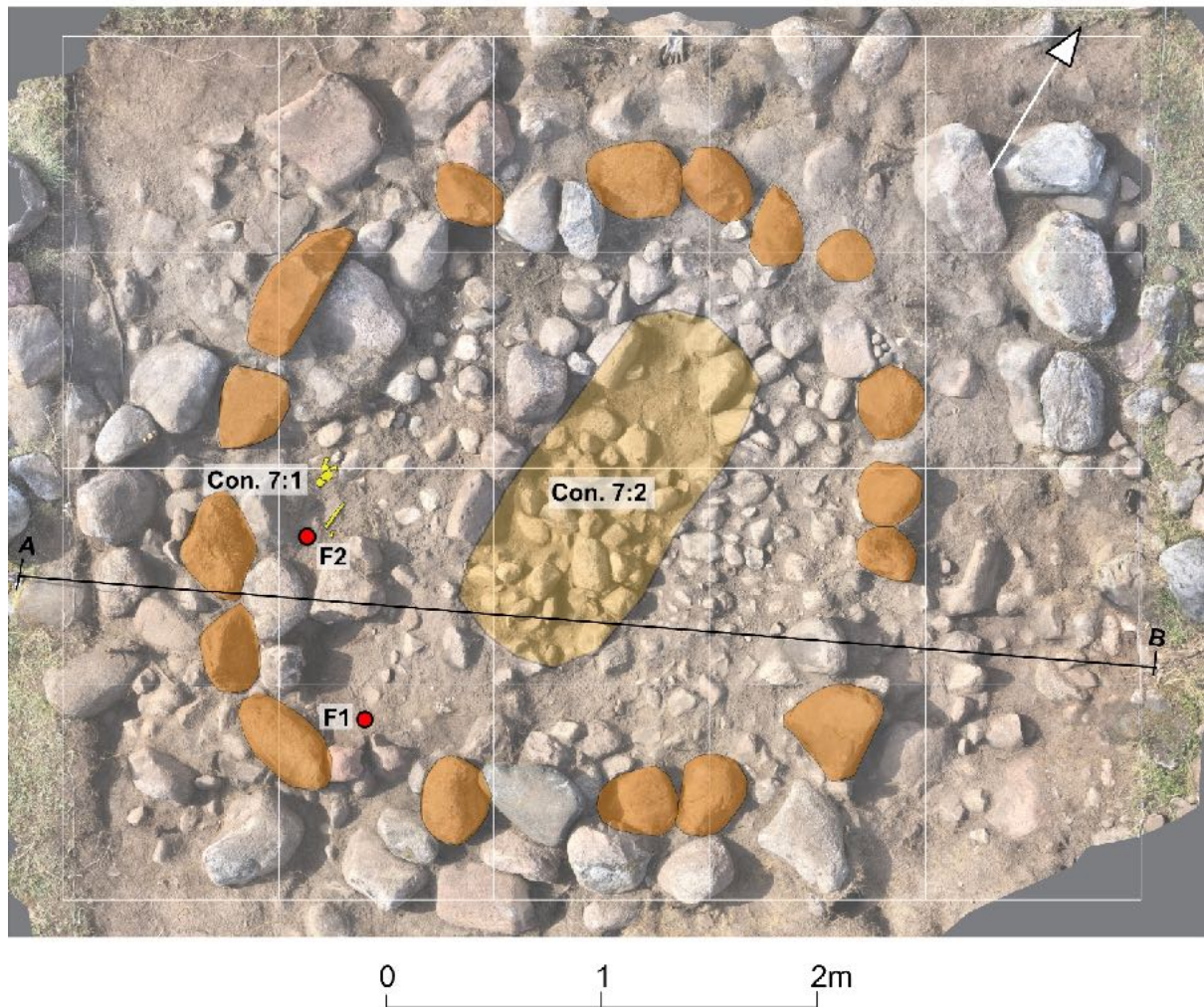


Figure 46. Vertical plan of facility L1977:4153, construction 7, layer III. Construction 7:1 consists of a partial skeleton found on the same level as ceramic fragments (F1) and a small whetstone (F2). Construction 7:2 consists of the full skeletal remains of an adult male.

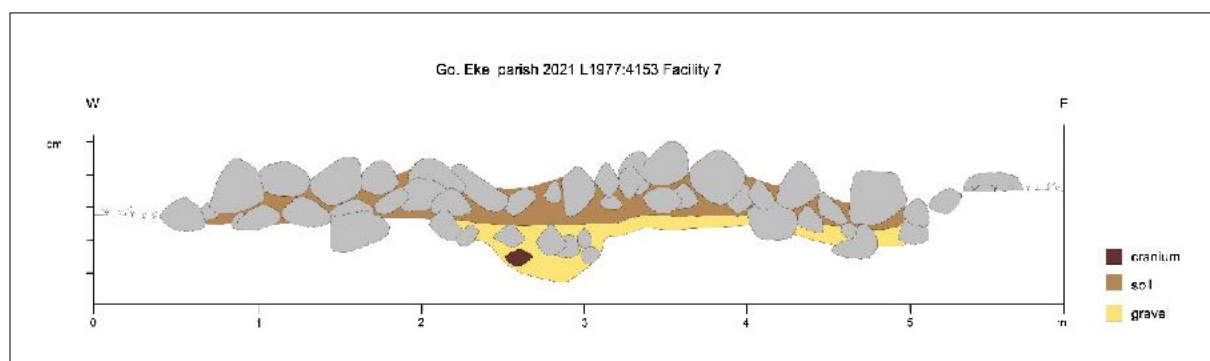


Figure 47. Profile of facility L1977:4153, including grave construction 7:2. The cranium of the individual was found on the southern end of the grave.

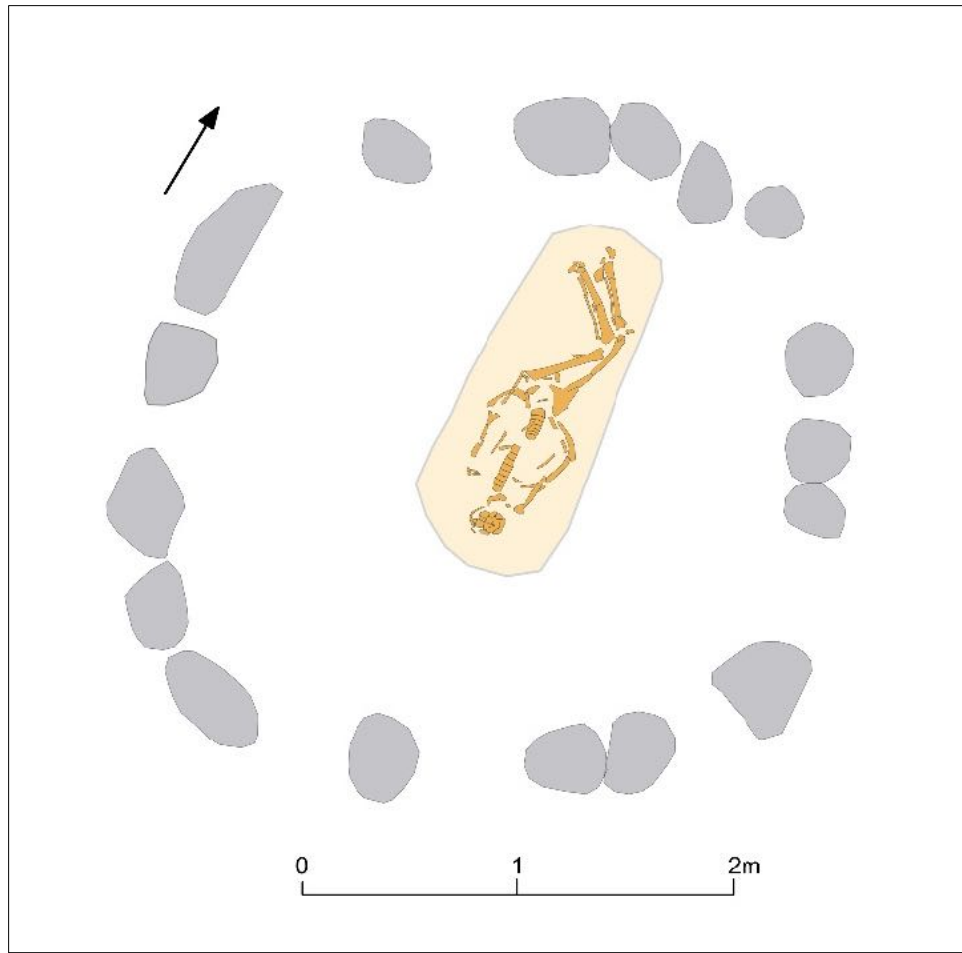


Figure 48. Vertical plan of facility L1977:4153, construction 7:2 and the surrounding stone chain. The skeleton was oriented north to south, with the head placed in the southern end, indicating a typical pagan burial.



Figure 49. Vertical photo of the skeletal remains of construction 7:2. The individual was found with a bronze pennanular brooch (F4), belt fittings (F5) and an iron knife (F8).



Figure 50. Small whetstone (5.8 cm long x 2.1 cm wide) (F2) with circular hole on one end, possibly to facilitate suspension. Found next to the partial skeletal remains (7:1).

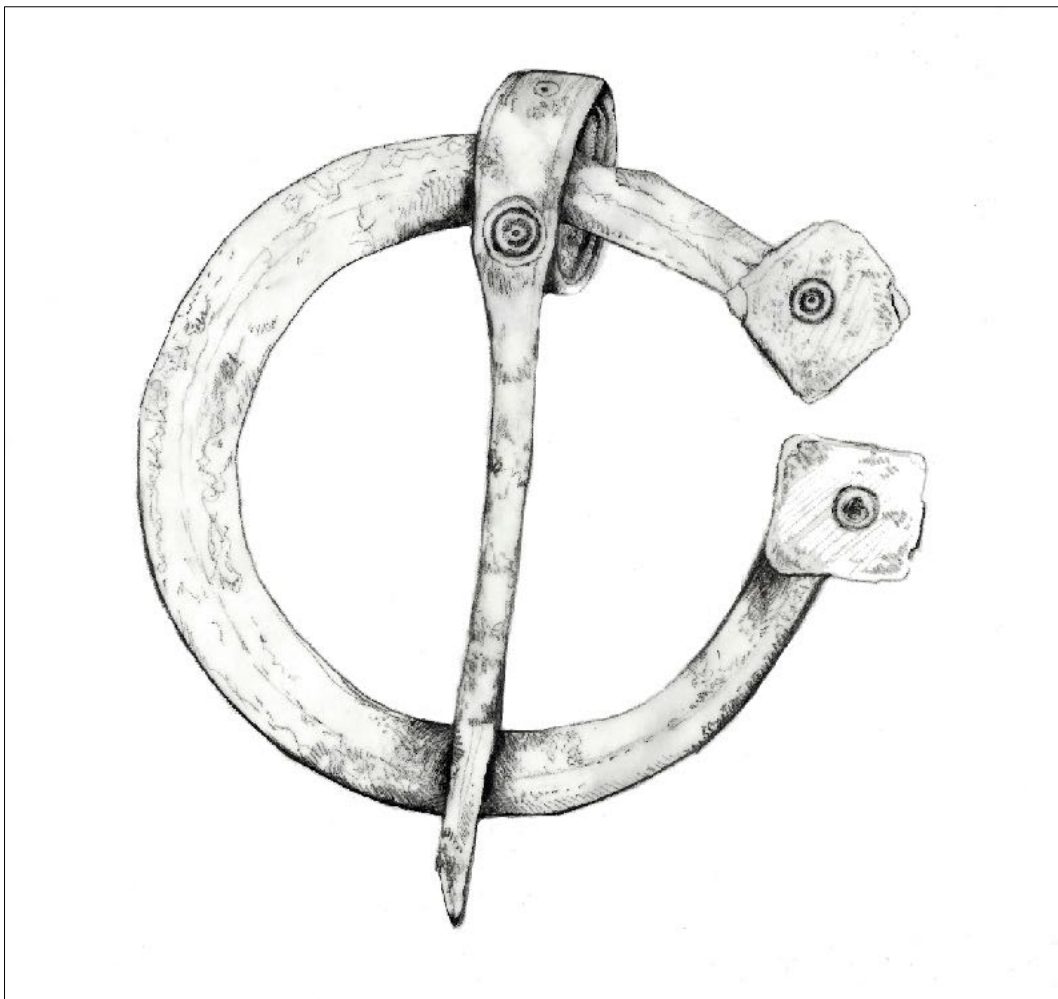


Figure 51. Pennanular brooch dating to the Viking Period found in grave construction 7:2. Illustration by Alice Rosa Brusin ©.

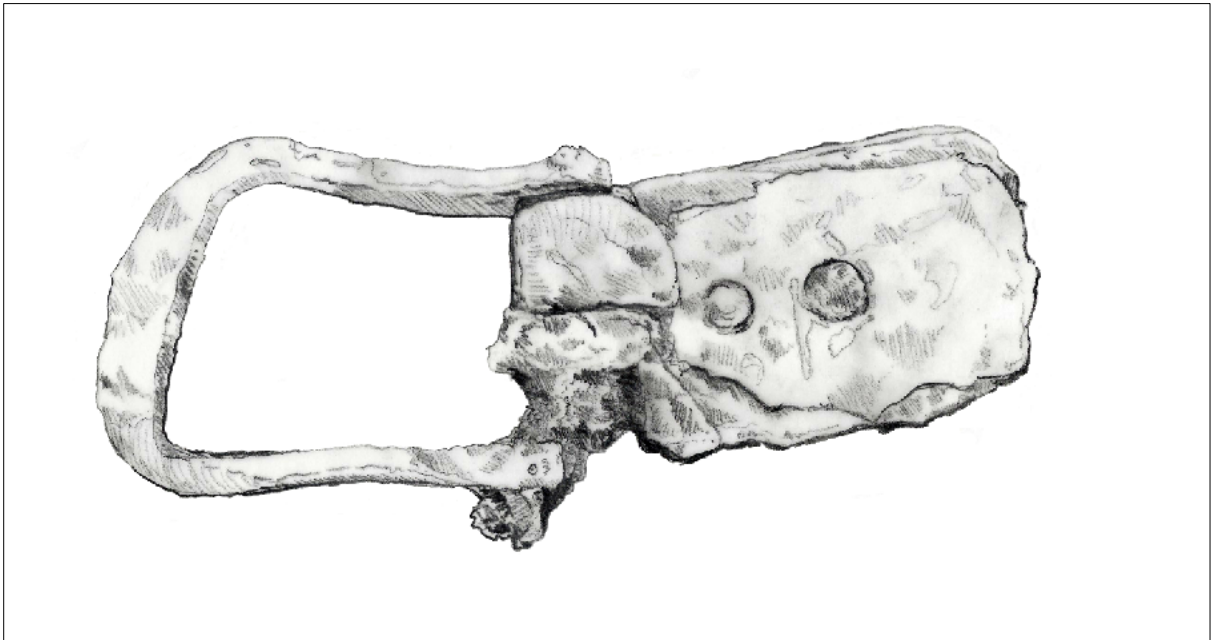


Figure 52. Belt fittings found in grave construction 7:2. Illustration by Alice Rosa Brusin.©



Figure 53. Bones from a small bird found near the cranium of the skeleton in grave construction 7:2

Ancient monument, Eke parish, L1977:4153

Construction no.	8
Coordinates	SWEREF 99TM, N 6340287, E 707243
Type	Stone setting
Size	3 m x 3 m (N-S)
Form	Round
Above sea level	
Situation	Part of the grave field L1977:4153
Analyses	

Description:

The site looks like a small grave construction, with a visible circle of stones. The construction is located in the same area as the other graves previously excavated, in the south-west area of Gudings castle. The trench built around the construction measures 3 x 3 meters. A few stones in the south-east corner of the circle are not visible on the surface of the ground. The construction is positioned on an inclined plane: the north-west corner is higher than the opposite corner. A big red stone is located, clearly visible, in the middle of the circle. The vegetation over the structure consists of small bushes and grass.

Layer I

After the removal of the turf the circular pattern highlighted previously disappeared. An ensemble of small and medium stones, which seems to be inserted inside an oval shape, is concentrated around the big red stone in the middle. This same stone bears signs of possible contact with fire. There are also a few big stones that don't seem to follow any pattern. A preliminary survey with the metal detector highlights the presence of possible non-ferrous metal close to one of the big stones in the north-west area of the trench. One horseshoe nail was found close to the surface.

Layer II

Another layer of soil was removed from the trench and revealed more smaller stones in the southeast corner. The previous oval shape of the stones was no longer visible, and the facility took on a squarer shape.

Layer III

Some small and medium sized stones and a layer of soil were removed from the trench, revealing gravel and some stone packing. After this there was no clear pattern visible in the stones. The north-west corner of the trench was higher and consisted of more stones compared to the south-eastern side of the trench. A profile over the trench was created from

the southwest corner of the trench to the north-eastern corner, and stones visible in the profile are marked with a blue dot in the aerial picture of the third layer. The metal detector did not give any indications to the presence of any metal objects inside the trench and no finds were found from this final layer. Previously removed stones and soil were put back into the trench, reconstructing the original stone setting.

Interpretation:

As a result of the lack of finds, as well as any clear patterns made out by the stones, this facility is difficult to date or interpret. There are some indications that the excavated area included only a part of a larger construction. Since the facility is in such close proximity with the west wall of Gudings castle, there is also the possibility that it may have been part of the wall.

Illustrations:

Find no:	Description
38	Horseshoe nail, fragmented

Illustrations:



Figure 54. Oblique photo of facility L1977:4153, construction 8 after de-turfing. Picture taken towards the north.

Go. Eke parish 2021. L1977:4153. Construction 8. Layer II



Figure 55. Vertical photo of facility L1977:4153, construction 8 after de-turfing. A horseshoe nail (F38) was found in the north-west corner.



Figure 56. Vertical photo of facility L1977:4153, construction 8, layer III.

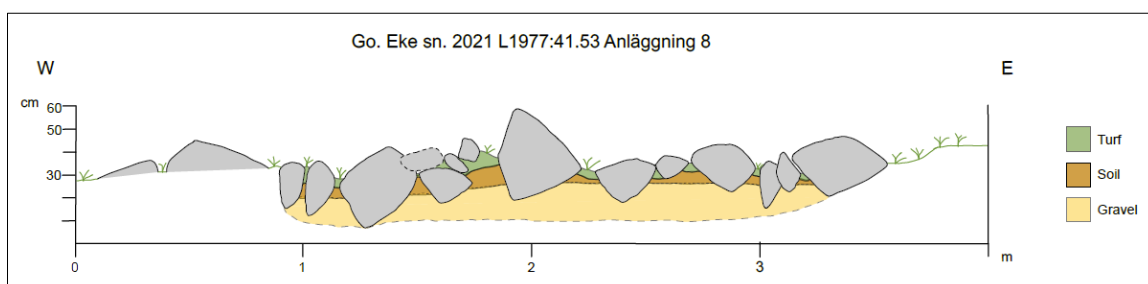


Figure 57. Profile of facility L1977:4153, construction 8, layer III.

Ancient monument, Eke parish, L2021:1493

Construction no.	1
Coordinates	SWEREF 99TM, N 6340287, E 707243
Type	Stone setting
Size	4 m x 4 m
Form	Round
Above sea level	
Situation	Located on a clear embankment about 400 meters west of Gudings castle.
Analyses	

Description:

The facility is recorded in the antiquities register as a grave. It consists of a stone packing with a diameter of approximately 2.5 m and a height of 20 cm above the ground. The stones range in size from 0.05 x 0.1–0.2 x 0.3 m. It is located on a low ridge that rises approximately 30 cm above the surrounding area. The trench over the facility measures 4 x 4 m. There is sparse vegetation on the surface consisting of occasional tufts of grass and some moss. The turf layer is very thin and loose soil is encountered almost immediately. There are some roots, and a tree stump is found in the south-eastern part of the trench. After only a few centimeters, light, coarse lime gravel is encountered. It occurs first in the centre of the facility and then outwards towards the edges. The gravel is mixed with dark soil. There is no cultural layer. In the centre of the facility, under the stone packing, there is a larger earth-fixed boulder, measuring up to 1 meter in size. The impression is that the stone packing is concentrated around this large boulder.

There were no finds, charcoal, or hint of cultural layers here either.

Interpretation:

The absence of finds, a cultural layer or other indications of human impact makes it difficult to date the facility or interpret its function. The shape of the facility after de-turfing does not give a clear picture that it is a grave and it appears to be empty.

Illustrations:

Go. Eke parish. L2021:1493. Layer I



Figure 58. Vertical plan of facility L2021:1493 after de-turfing.

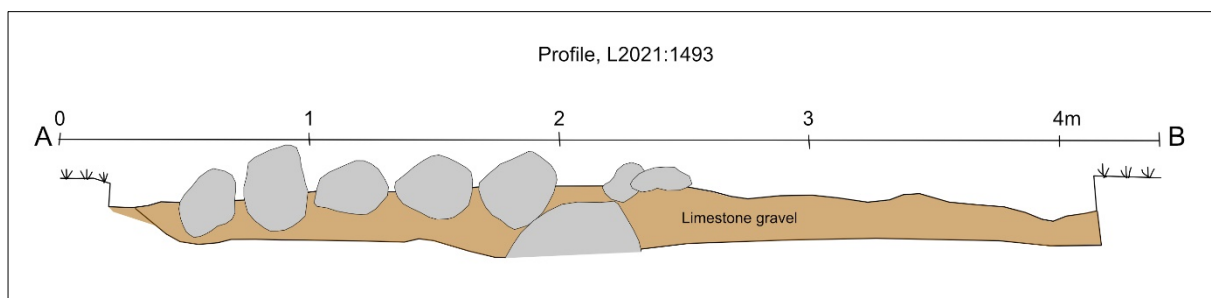


Figure 59. Profile of facility L2021:1493 oriented towards the west.

Ancient monument, Eke parish, L2021:1494

Construction no.	1:1
Coordinates	SWERERF 99TM, N 6340457, E 707549
Type	Grave
Size	2.5 m
Form	Round
Above sea level	5.4–5.5 m
Situation	Located fairly high on the ridge leading from Gudings castle to the south
Analyses	C14 dating from bone in construction 1:1, dated to BP 1932±29, AD 23-203 with 2 sigma

Description:

Before de-turfing, the construction consists of a partially rounded stone setting, flat and delimited by markedly large stones that in places form part of a circle, and in other places form straight lines, within an area of about 6 meters in diameter. The interior is fairly flat with occasional stones protruding from the turf.

Thus, before de-turfing, one could imagine two straight sections consisting of large stones (0.8-1.0 m), from the south-west corner out to the south-east corner and from the south-east corner to the north-east corner. There is also a rounded stretch consisting of large stones (0.8-1.0 m) from the north-east corner to the south-west corner. The construction is overgrown with a lot of roots.

After de-turfing and cleaning, an area free of stones appears along the eastern side. In the north-west corner there was a large stone packing, 2.5 m in diameter, delimited by grey stones (0.5-0.7 m). In the south-west corner was a diffuse rock pack, 2 meters in diameter. Large stones (0.4-0.6 m) were found along the entire edge of the facility. An area in the middle, 0.5 meters in diameter, is fairly empty of rocks. After excavating the loose soil, several possible smaller facilities within the stone circle could be detected, but only one could to some extent be considered a separate facility based on the presence of several human bone fragments (construction 1:1). The cleaning down to more or less untouched soil layers gave no finds or cultural layers in general, except for a heavily rusty horseshoe nail (F10) of iron, loosely lying in the soil.

Construction 1:1

There is a round or oval-shaped construction delimited by nine large (0.4-0.6m) stones. Inside the larger stone circle is a smaller, diffuse stone packing consisting of stones ranging

in size from 0.1-0.2m. In the north-western corner of the packing and east of the centre were unburned bone fragments (F11-15), which preliminarily have been judged to be human. The fracturing of the bones occurred a long time ago since no fresh fractures can be detected. In addition to this facility, a couple of areas were partially investigated with a hint of separate facilities in the form of stone packings (1:2 & 1:3). However, no construction details, cultural layers or finds gave any indication that these were special remains/constructions, whereby these were excluded.

Interpretation:

The initially interpreted grave could not be verified, and the stone packing is unclear in function and construction. The smaller, almost round stone packing, delimited by larger stones, possibly forms a grave given the discovery of several pieces of human bones. These are mainly long bones, probably tibia. The absence of other bone material suggests that it is either that the skeleton has for the most part been removed and moved, like other graves within Gudings castle, or possibly that the bones come from a destroyed grave in the vicinity, it is unclear where in that case. No objects provide any guidance on the dating of the bones. A sample of the long bone was submitted for radiocarbon dating and gave the dating to BP 1932±29, with correlated value to AD 23-203.

Find Material:

Find no.	Description
10	Horseshoe nail, iron
11-15	Bone fragments, likely human, 110 grams in total

Illustrations:



Figure 60. Detail of facility L2021:1494, construction 1:1 in the foreground and 1:3 can be seen in the background.

L2021:1494. Construction 1. Layer I



Figure 61. Vertical plan of facility L2021:1494 constructions 1:1, 1:2, and 1:3 are highlighted in yellow.



Figure 62. Detail of facility L2021:1494, construction 1:3 in the foreground and 1:1 can be seen in the background.

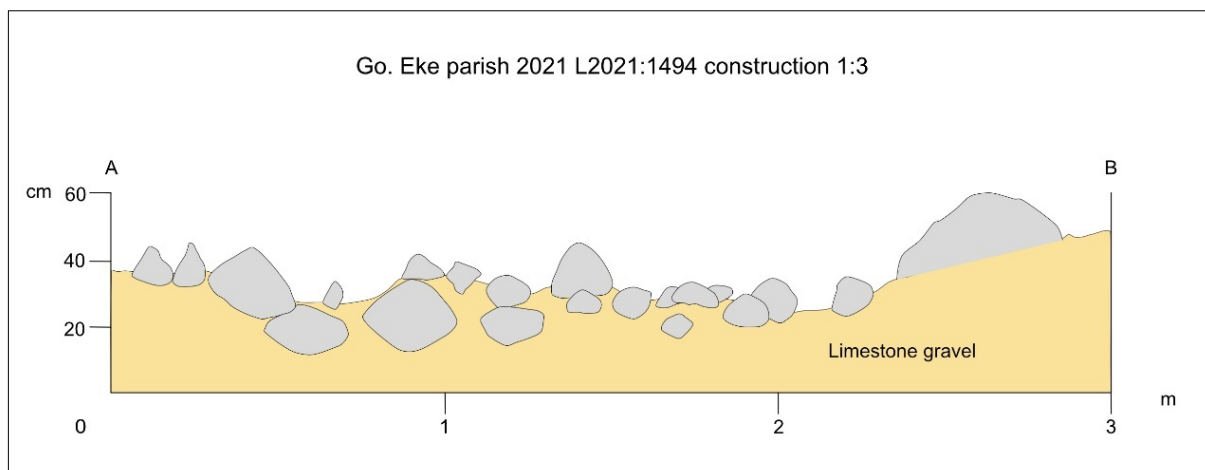


Figure 63. Profile of facility L2021:1494 construction 1:3, oriented towards the north/north-east.

L2021:1494. Construction 1:1

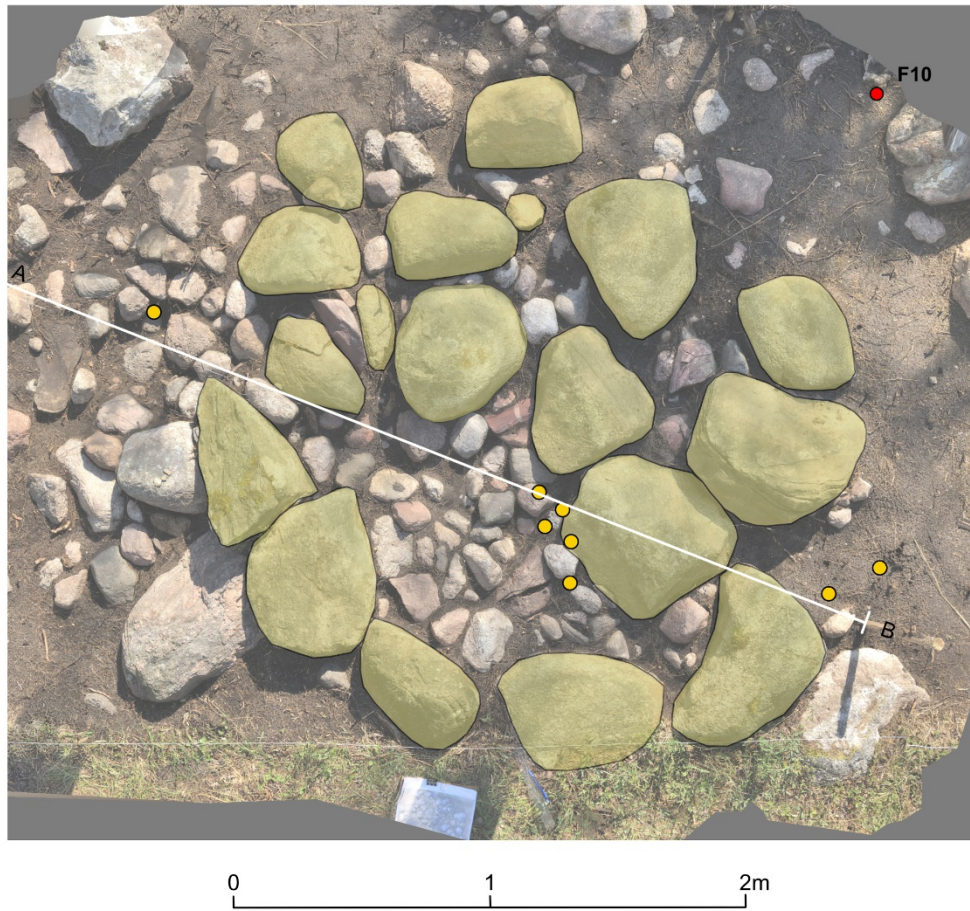


Figure 64. Vertical plan of facility L2021:1494, construction 1:1. The yellow circles indicate human bone fragments found in and around the stone packing. A horseshoe nail (F10) was found outside of the construction.

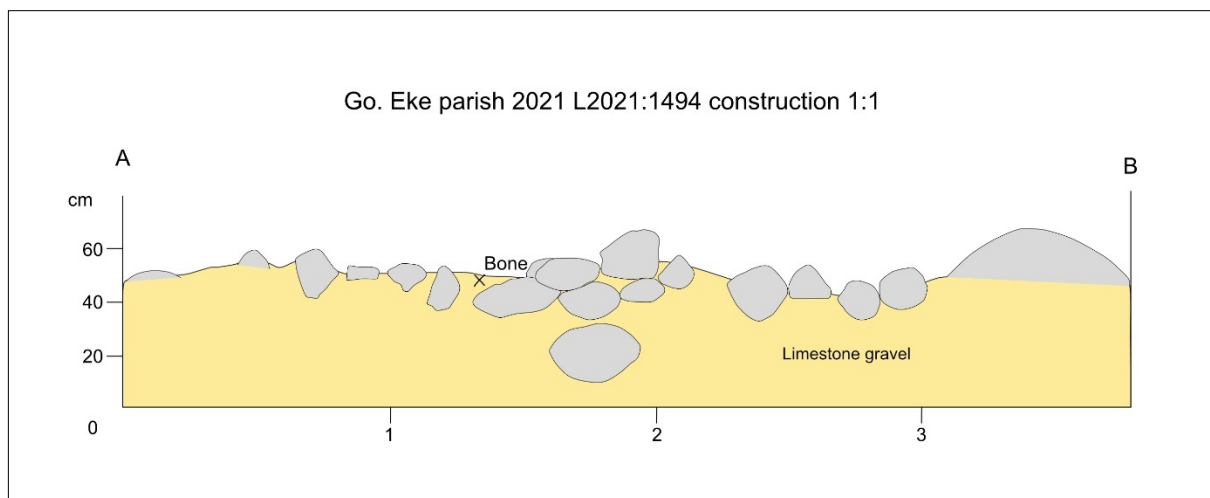


Figure 65. Profile of facility L2021:1494, construction 1:1, oriented towards the south/south-east. Human bone fragments were found mainly in and around the circular stone setting.



Figure 66. Oblique photo of facility L2021:1494 after restoration given an impression how it looks before de-turfing.

Ancient monument, Eke parish L2021:1494

Construction no.	2
Coordinates	SWEREF 99TM, N 6340432, E 707560
Type	Stone setting
Size	ca. 3 m in diameter
Form	Almost round
Above sea level	
Situation	Situated on a small height in the western part of the monument L2021:1494
Analyses	

Description:

The facility is located on a slight elevation and has a depression in the middle. Along the edge of the facility there are several grey stones, up to 0.7 m in size, which appear to have been disturbed. The facility is otherwise covered with turf and vegetation.

After de-turfing, a packing of grey stones (0.3–0.4 m) appears in the middle of the facility. There are two large stumps in the south-west section of the facility. There are some roots, but the middle area is relatively easy to dig. After about 2–3 cm of excavation, light lime gravel appears in the central part of the facility. Towards the north there is a stone packing around a possibly collapsed curbstone. The stones are from 0.1–0.2 m in size.

During further excavation, fist-sized stones appear in the central part of the facility without any visible order. A couple of the larger stones rest on smaller stones. The function of the facility is unclear. No finds, charcoal or internal structures were found.

Interpretation:

It is doubtful whether the facility should be seen as a human construction, although the almost circular shape of large grey stones indicates this. This may be a natural formation, given the abundant presence of boulders along the ridge, on which several other remains lie.

Illustrations:



Figure 67. Oblique photo of facility L2021:1494, construction 2. There is a hint of a circle formed by 8 large grey stones. You can also note the stone packing in the lower left corner of the picture, next to the inner circle of stones, which is probably a natural formation.

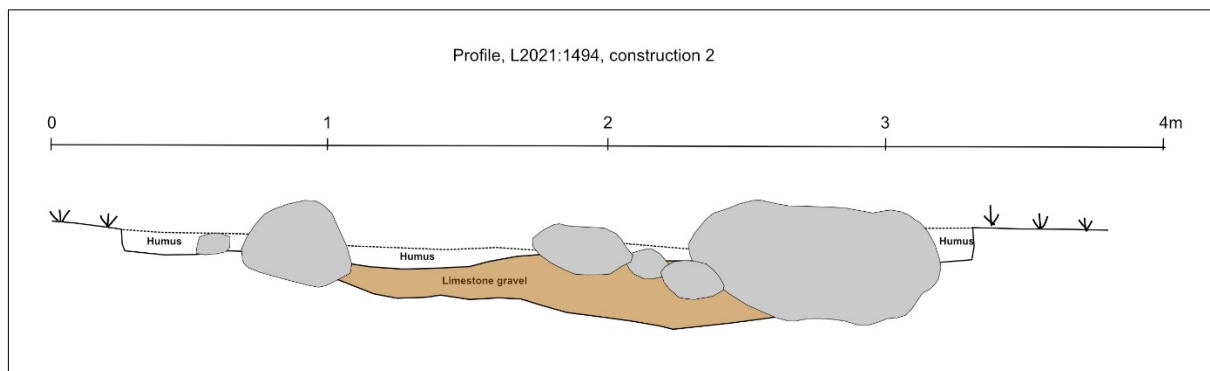


Figure 68. Profile of facility L2021:1494, construction 2, oriented towards the north-east. Only the area within the stone circle was excavated down to sterile ground.

Ancient monument, Eke parish, L2021:1494

Construction no.	3
Coordinates	SWEREF 99TM, N 6340452, E 707575
Type	House construction
Size	6m x 5m (E-W)
Form	Rectangular
Above sea level	
Situation	Located on the eastern edge of the ridge from Gudings castle to the south.
Analyses	

Description:

The construction is an approximately 6 x 5 meters large stone setting with a layer of turf covering it. The stone packing consists of grey stones from 0.2 meters in diameter to 0.7 meters. There is a predominance of larger stones in the southern and south-western areas of the trench. The construction is flat but follows the terrain as slightly sloping from south to north.

After the de-turfing and cleaning, the hint of a shell wall along the northern and southern side and a presumed opening in the eastern wall (approx. 0.8 m wide) could be noted. The inner part of the stone packing was removed, while the walls were left untouched. Under the top layer of stones was a new layer of grey stones, but in a slightly smaller size, ca. 0.2-0.3 m in diameter. The small stone-free surfaces, one in the middle of the facility and one in the northern part of the wall, have an underlying layer of stones, which means that the stone packing is perceived as smoother and more homogeneous in layer 2 than in layer 1. Up to and including layer 2, there are no traces of a clear cultural layer, coal or finds. The soil is still dark and compact through layer 2. There is some element of gravel, most clearly in the northern part.

Layer 3 in the central part of the facility consisted of dark soil mixed with up to fist-sized stones. Under this came sterile gravel, no finds or deviating soil conditions. A rectangular, inner surface ca. 2.8 x 1.6 m (southwest-northeast) with fewer stones can be distinguished. At the northeast short end there is a clear wall construction, consisting of stones about 0.3-0.4 m in size arranged in three levels. A ground-fixed block, on top of which a large stone (0.6 m) is wedged by means of smaller stones (See figure #). All this forms a wall sloping to the north-east.

Around the facility, larger stones appear to be placed on top of smaller ones, as if to fix them. In the south-west, larger stones with a width of about 0.8 meters are missing. Several stones appear to have been moved by roots, five larger stumps from pines testify to this.

Interpretation:

The shape, size and the implication of a shell wall indicate that the stone setting could be interpreted as a 'tomtning'. The absence of dateable material makes it difficult to determine the age of the facility, but it is apparently related to other facilities in the area.

Illustrations:

Go. Eke parish 2021. L2021:1494. Construction 3 layer II



Figure 69. Vertical plan of L2021:1494, facility 3. A possible opening in the construction can be seen on the eastern side of the stone packing.



Figure 70. Detail of northern wall of L2021:1494, facility 3. Small stones can be seen stacked on top of each other, sometimes with larger stones on top of these.

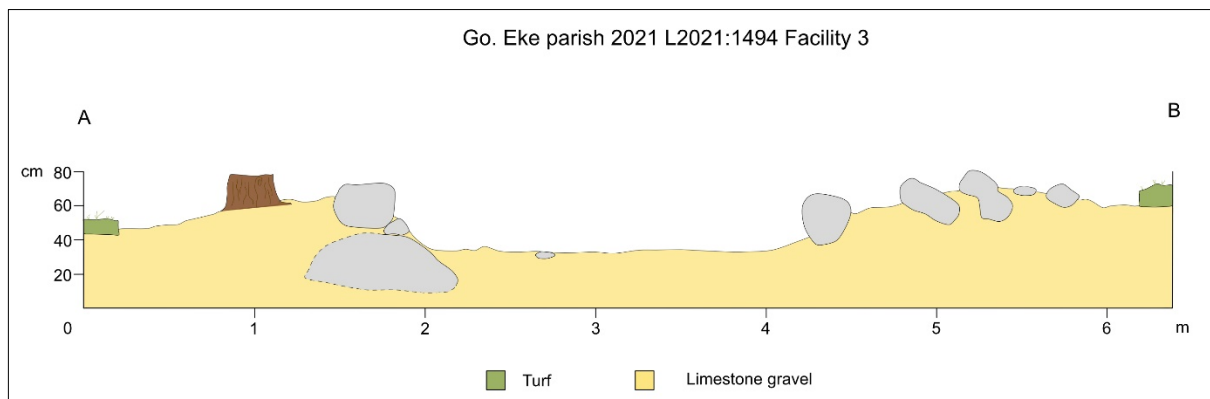


Figure 71. Profile of L2021:1494, facility 3, oriented towards the North.

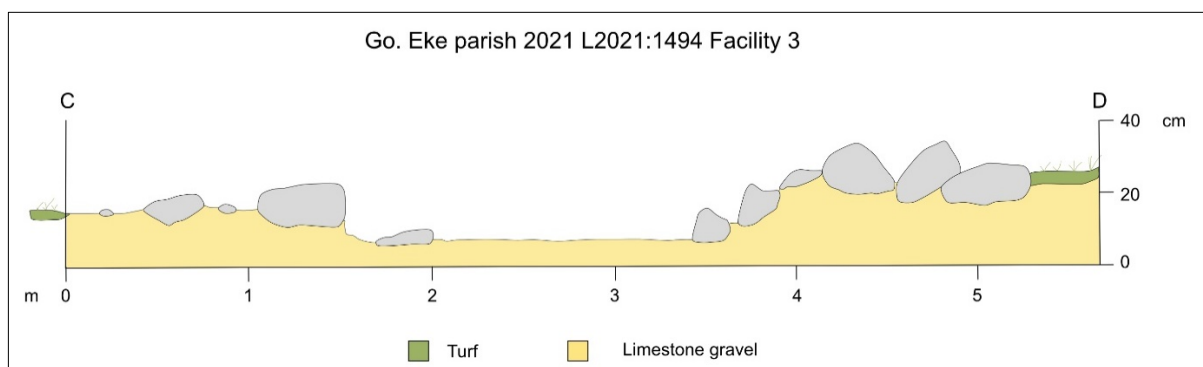


Figure 72. Profile of L2021:1494 facility 3, oriented towards the East.

Ancient monument, Eke parish, L2021:1494

Construction no.	4
Coordinates	SWEREF 99TM, N 6340427, E 707603
Type	Stone setting
Size	5m x 6m
Form	Mainly rounded with vague demarcation
Above sea level	
Situation	Central within the ancient monument at a slight height.
Analyses	¹⁴ C dating of charcoal from a layer under the construction gave the value BP 1742±29, correlated to AD 244-402

Description:

Before de-turfing, the facility appears as a turf-covered stone mound with several visible 0.3-0.6 m large grey stones. Central in the facility are two larger stumps. The plant is of a diffuse shape but appears to be rounded.

After de-turfing, several grey stones come to light with a dark layer of soil in between. The northern part of the facility is located slightly higher than the southern part. The north-eastern part contains gravel, probably the result of tree root movement. The stone packing consists of several layers of stones and during further investigation it came to be concentrated in the southern part of the facility, which meant that the subsequent stone layer was removed at the height of the profile. The ground between the stones was still dark with elements of sand. Some smaller charcoal fragments were found in this layer. A final survey down to sterile and untouched soil was done within a limited area of about 3 x 2 meters within the southern half of the facility. After examining down to sterile sand and clay, the excavation area was then expanded slightly to the south-east and south-west. The investigation found no traces of constructions, nor of any clear cultural layers, even though individual charcoal fragments were found closer to the bottom. After examination, the facility was restored.

Interpretation:

The investigation did not show any clear indications of the function or dating of the construction. The facility consisted of several layers of larger and smaller stones, in no apparent order, although one could note a certain similar size of stone in the lower layer. No interpretation of the facility's function can be made, but it should be seen as part of the whole environment with several remains and monuments with similar characteristics in the immediate area. The ¹⁴C of the charcoal from the bottom points to an earlier activity.

Find Material:

Find no.	Description
16	Small amount of charcoal from the bottom of the construction

Illustrations:

L2021:1494. Construction 4. Layer I

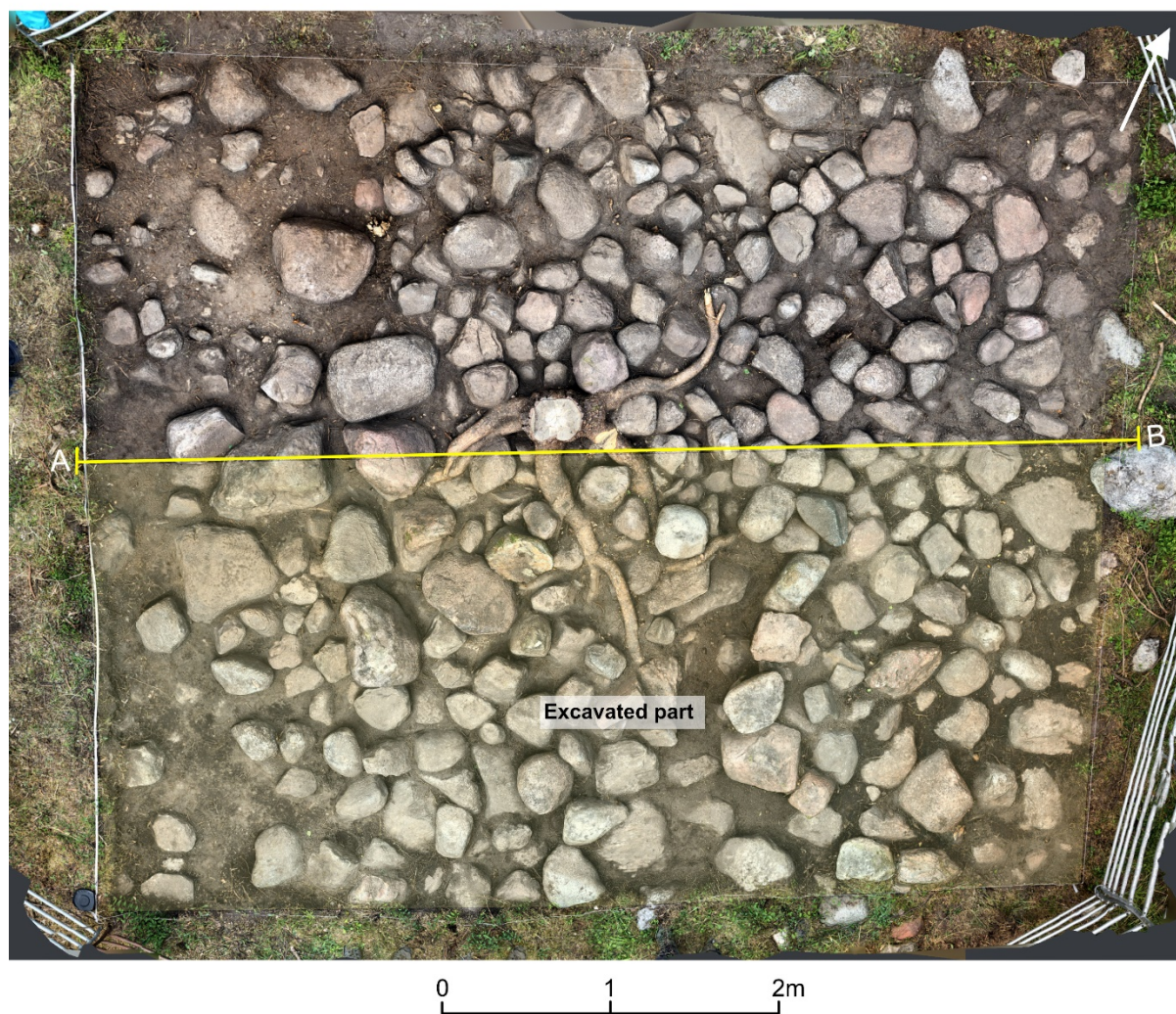


Figure 73. Vertical photo of facility L2021:1494, construction 4 after de-turfing. Further excavation was limited to the southern half of the facility.



Figure 74. Oblique photo of facility L2021:1494, construction 4 after de-turfing. Picture taken from the north.

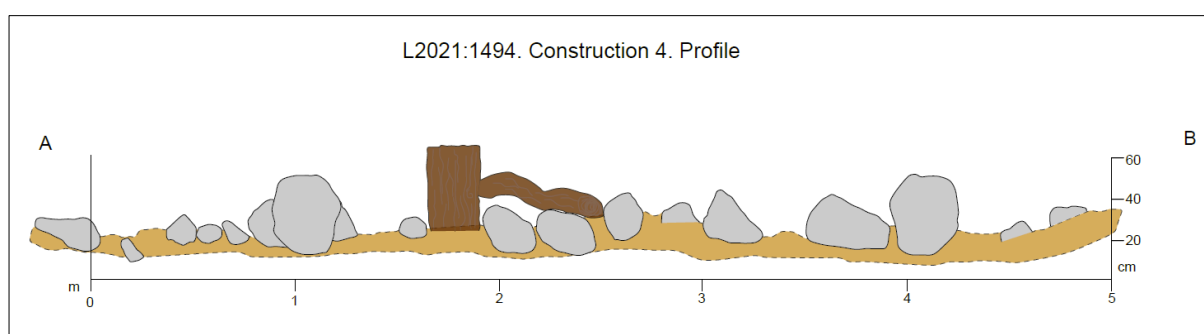


Figure 75. Profile of facility L2021:1494, construction 4, oriented towards the south.



Figure 76. Oblique photo of facility L2021:1494, construction 4, after restoration.

Ancient monument, Eke parish, L2021:1494

Construction no.	5
Coordinates	SWEREF 99TM, N 6340391, E 707632
Type	House construction
Size	5 m x 9 m (N-S)
Form	Rectangular
Above sea level	
Situation	The construction is located on a low gravel ridge and oriented with the north-west side towards the wall of the hillfort (Gudings castle) and the south towards the sea.
Analyses	¹⁴ C dating of the fireplace gave the dating BP 1316±29, correlated to AD 655-707.

Description:

Before the de-turfing, the facility appears as a rectangular construction with clear traces of a shell wall along both long sides, about 1-1.2 meters wide, consisting in the western part of smaller stones and in the eastern part of very large stones, up to 0.8 meters. One can notice a slight round shape in the eastern short side.

After de-turfing and cleaning, a clear shell wall appears that surrounds the entire facility with a relatively stone-free inner area. The western part towards the western short side, houses a dense packing of larger stones (0.3-0.5m). No entrance can be noted, nor any traces of any floor or other constructions indicating the existence of a regular roof.

The facility is surrounded by fairly abundant fallen rock and also naturally occurring rock, which makes the exact demarcation of the outside of the facility somewhat unclear. During further investigation, the inside of the facility was exposed. The shell wall, initially visible on the surface, was judged to be built on slightly smaller stones than the ones lying on top, along with some relatively large stones. The shell wall visible on the surface seems to have at least one to two underlying layers of smaller stones with the character of a foundation, i.e. that the large stones that form the shell wall lie on top of smaller stones. Inside, the southern corner was fairly angular. The south-western inner wall along with the south-eastern side was fairly straight up to the location of the hearth. The north-western inner wall was also clearly straight, while the north-eastern (eastern short side) was strongly curved.

The inside of the shell wall was left untouched with the exception of the southern half of the south-east wall. Two stones were removed (for safety reasons) during the excavation and later returned. A collapsed rock at the southern end of the south-east wall was relocated to its original location.

The surface inside the shell wall was dug down to untouched soil layers. Under the stone packing in the south-western half, there were smaller stones in large quantities. In the north-eastern half, there was first some pure on a relatively stone-free surface. A limited area in the north-eastern half (the larger area with moist soil) was dug deeper to see the layer sequences in the natural soil. It first showed about 12-15 cm of fine soil and below that about 15 cm of clay, to be considered as the former seabed. No traces of a paved floor were found.

A hearth was located along the south-eastern inner wall (construction 5:4). The hearth consisted of an approximately 1-meter rounded facility containing larger and less fire-affected stones and quite abundant coal in a clear horizon towards the bottom. Charcoal samples were taken (F19 and F20). A profile drawing was made, including the hearth and the house wall. Additional traces of charcoal were found about 2 meters south along the south-eastern wall (F21). In addition to the above-mentioned charcoal finds, some loose charcoal was also found within the construction (F22-F24).

Remains of any floor were completely missing. Of course, some stones may have been used as the outer edge stones of the house construction, but no form of regular pattern or the like could be noted. No traces of an entrance could be noted. Remains or traces of a possible roof were completely missing.

The finds, in addition to charcoal, consisted of a horseshoe nail (F17), found immediately outside the excavated surface using a metal detector and also a small piece of bone (F18) in the western corner of the shaft at the edge of the shell wall, probably animal bone.

Interpretation:

The construction has a clear shell wall built up of large stones lying on smaller stones and with some filling of smaller stones, with a shape that can almost be characterized as rectangular with a rounded shape in the eastern short side. Next to the southern long wall was a clear fireplace with plenty of burnt stones and charcoal. The hearth undoubtedly belongs to the construction, which means that a radiocarbon analysis of the charcoal from the hearth will indicate the dating of the construction.

The shape and construction of the facility is almost house-like, but the lack of a clear entrance, walls, floor, etc., means that the facility should be interpreted as a 'tomtning' more than as a regular house.

Find Material:

Find no.	Description
17	Partial horseshoe nail
18	Small piece of bone, 2 gr
19	Charcoal. sample nr. 2.
20	Charcoal, sample nr. 1
21	Charcoal
22	Charcoal
23	Charcoal, loose find
24	Charcoal, loose find
39	Sheep bone

Illustrations:



Figure 77. Oblique photo of facility L2021:1494, construction 5, before de-turfing. A rectangular construction with a shell wall can be seen through the turf.

Go. Eke parish. L2021:1494. Construction 5. Layer I, de-turfing and cleaning



0 1 2 3 4m

Figure 78. Vertical photo of facility L2021:1494, construction 5, after de-turfing. A relatively stone-free area can be seen in the center of the construction. Larger stones occur on the northern side of the construction.



Figure 79. Oblique photo of facility L2021:1494, construction 5, after de-turfing. Taken from the south-west corner.

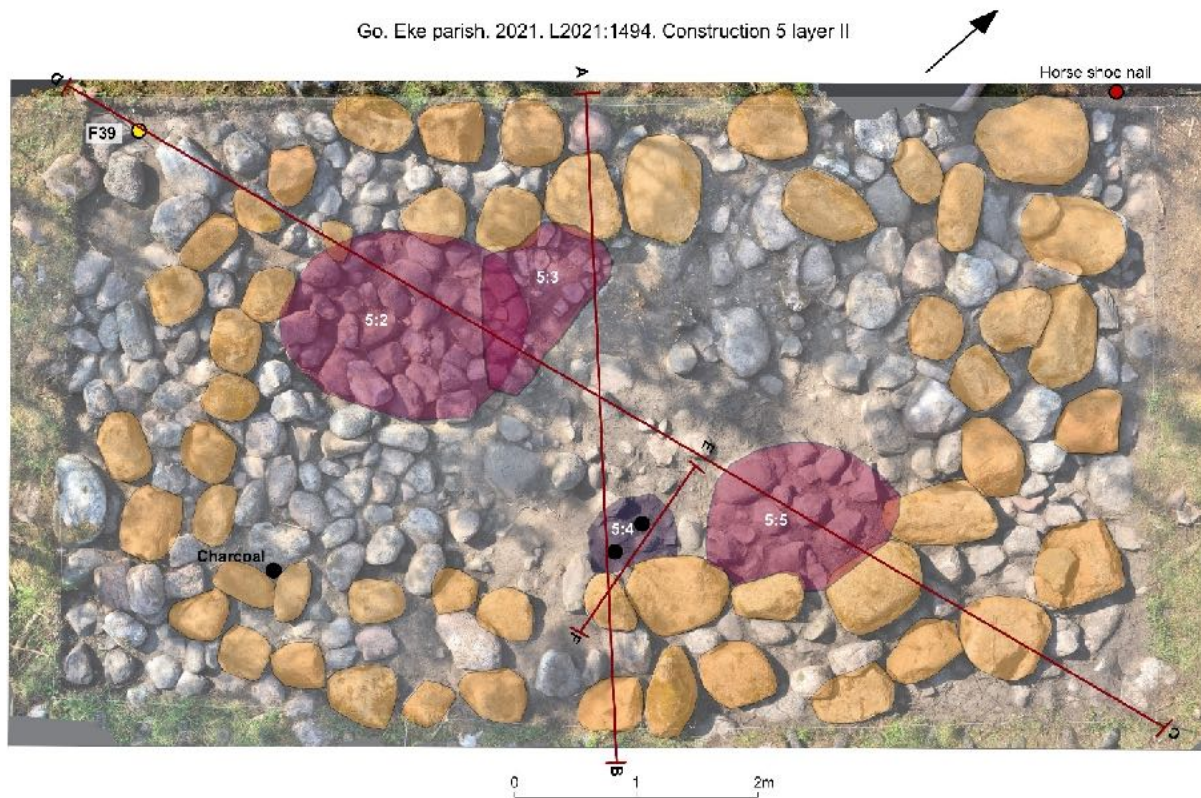


Figure 80. Vertical plan of facility L2021:1494 construction 5. The outer stones of the shell wall are highlighted in orange. A hearth (5:4), situated along the south-eastern wall, is highlighted in grey with charcoal shown in black. A sheep bone (F39) was found in the south-western corner and a horseshoe nail (F17) was found in the northern corner.



Figure 81. Oblique photo of facility L2021:1494, construction 5:2 in the south-west corner.



Figure 82. Oblique photo of facility L2021:1494, construction 5:5 in the eastern corner.



Figure 83. Oblique photo of facility L2021:1494, construction 5:4, the hearth. Charcoal and fire-cracked stones can be seen in the center of the photo.

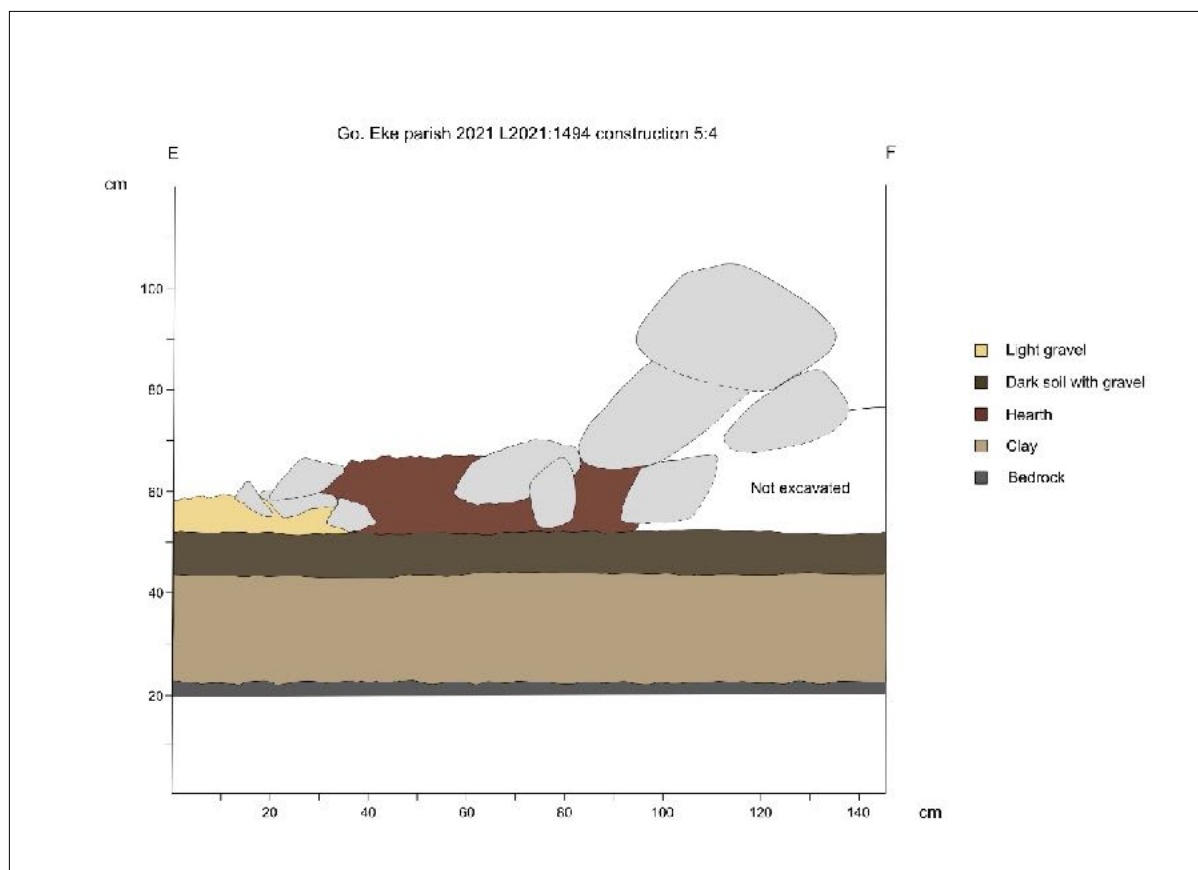


Figure 84. Profile of facility L2021:1494, oriented towards the east. Detail of construction 5:4, the hearth.



Figure 85. South-east corner of facility L2021:1494 construction 5.

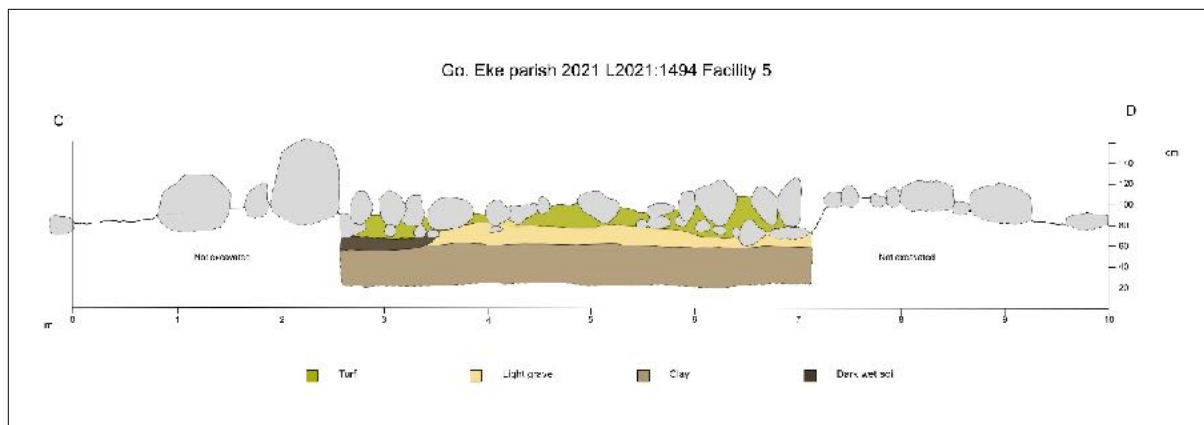


Figure 86. Profile of facility L2021:1494, oriented towards the north. Constructions 5:2, 5:3, and 5:5 are intersected by the profile.

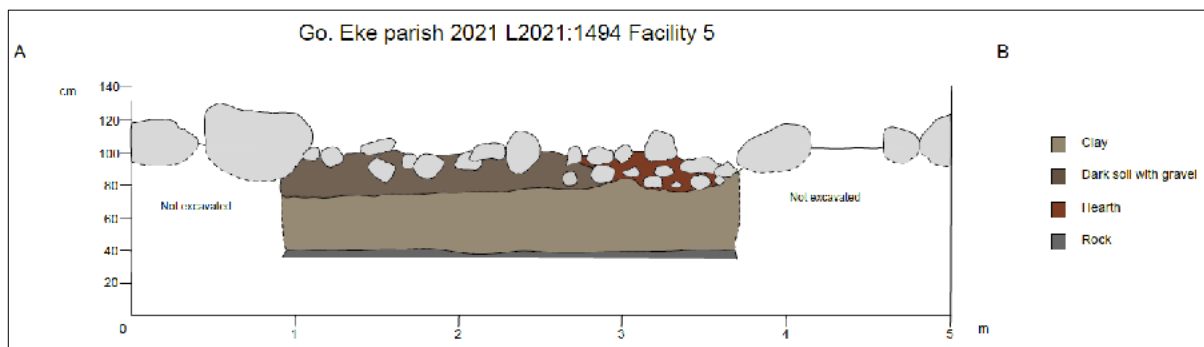


Figure 87. Profile of facility L2021:1494, oriented towards the north-east. Construction 5:4, the hearth, is shown abutting the south-eastern wall.

Ancient monuments, Eke parish, L2021:1494

Construction no.	6, 6:1-6:5
Coordinates	SWEREF 99TM, N 6340370, E 707679
Type	House construction with ramparts
Size	10 m x 5.3 m (N-S)
Form	Irregular
Above sea level	
Situation	The construction is situated in the southern part of a complex prehistoric environment, on a small ridge going in NE-SW direction.
Analyses	¹⁴ C dating from the fireplace in construction 6:4 gave the value BP 1253±29, correlated to AD 673-876

Description: The facility consists of a probable 'tomtning', approximately 6 x 4 m in size, which connects to a couple of stone ramparts. These ramparts fence off smaller, almost stone-free areas, approximately 4-6 m in size, which are divided into two areas by an intermediate stone rampart. The investigations of the construction came to be concentrated on two areas within the fenced area outside the site itself, with the aim of tracking the possible occurrence of activities within these areas. The two excavation areas were both placed in such a way that parts of the stone ramparts came to be included in the excavation areas (see figure 88). The excavation areas came to be called constructions 6:1 and 6:2. Below is a description of the two excavation areas.

Construction 6:1

The examined area consisted of a rectangle of 5 x 4 meters within which its northern side included parts of one of the stone ramparts that connect to the site itself in the southwest. The stone wall appeared before de-turfing as a clear, single-layered row of grey stones of up to 0.75 meters in size. Within the excavation area, there was also a larger pine tree in the eastern part. The area inside the stone wall appeared as a slight depression in the ground with only a few stones visible on the surface.

After de-turfing, a few more stones appear on the surface, as well as a clear concentration of stone in two layers in the southern part of the excavation area. This stone packing is referred to as construction 6:5. The area was examined down to the bottom with no trace of further remains and no objects, or charcoal were found, except for a well-preserved iron nail with a large head. The nail came at the edge of construction 6:5, i.e. (see figure 92) from a depth that indicates that it could be dated to the same time period as construction 6.

Immediately northwest of the northern part of the trench, a well-preserved fibula with estimated dating to the early Migration Period, i.e. 5th century AD, was found with the help

of a metal detector. It was at the bottom of what can be called a disturbed layer, in the transition to the untouched soil layers. It cannot be proven with full certainty that the fibula should be connected to the construction, but there is much to suggest that this is the case.

Construction 6:2

The other area that was excavated was a few meters further to the south and southeast from construction 6:1 and covered an area of 5 x 5 meters. In the eastern edge of the surface there was a clear, partly turf-covered, row of stones, almost circular, consisting of stones of different sizes (0.30 - 0.50 m). The stone wall had in part a shell wall character, consisting of two rows of stones, where the inner row consisted of larger stone and the outer row of smaller stone. The width of the stone wall was about 1-1.2 meters. Inside the stone wall was a slightly sunken surface that was almost stone-free before de-turfing.

After de-turfing, a nearly circular stone packing clearly appears. The surface inside was fairly stone-free. Two areas with traces of denser rock packings could be noted, both located within the western part of the excavated area. These constructions are referred to as 6:3 and 6:4. Construction 6:3 was estimated within the excavation area to be 1 x 0.95 m in size. The size of the stones varied between 0.20 and 0.50 m. The stones appear to lie directly on gravel.

The second presumed construction appeared as an area of about 1.35 meters in size with some brittle stones in the surface and rather dark soil, indicating a possible hearth. During the continued excavation and in connection with the establishment of profiles, it could be stated that the presumed construction 6:3 did not have any similar construction characteristics (within the excavated area) which indicated that it should be interpreted as a separate facility, so the excavation was discontinued.

The concentration of stone (6:4) and dark soil with elements of brittle stones in the surface, turned out to be a pit surrounded by and partially filled with larger brittle burnt stones. Towards the bottom of the pit/hearth, charcoal was found, of which a sample for radiocarbon analysis was taken.

Interpretation:

The stone walls, and surrounding areas, that came to be excavated constitute some form of enclosure in connection with a presumed 'tomtning' (not excavated) near where there is a clear opening in the stone wall in the northeast. The stone walls themselves cannot be dated as no constructions or dateable traces have been found that can be directly linked to them, with the possible exception of the nail that came from construction 6:5. Given its location in relation to the surrounding stone packing, the rather large and deep hearth/cooking pit that emerged within excavation area 6:2 most likely belongs to the facility, located in the unexcavated area. Charcoal from the fireplace point to a dating to Vendel Period.

Even the fibula, found about 0.5 meters outside the stone wall 6:1 cannot be linked with absolute certainty to facility 6. However, its location next to the stone wall and the depth of the layer it was found in, indicates that it should be dated to the same period as the 'tomtning' and the stone walls.

Find Material:

Find no.	Description
25	Fibula, bronze, dated to the 5-6 th century AD (Migration Period)
26	Nail with a large head and a curved end, iron
27	Charcoal from the construction 6:4, 1 gr
28	Charcoal from the ocnstruction 6:4, 2 gr
29	Burned bone, 5 small pieces, 1 gr.

Illustrations:

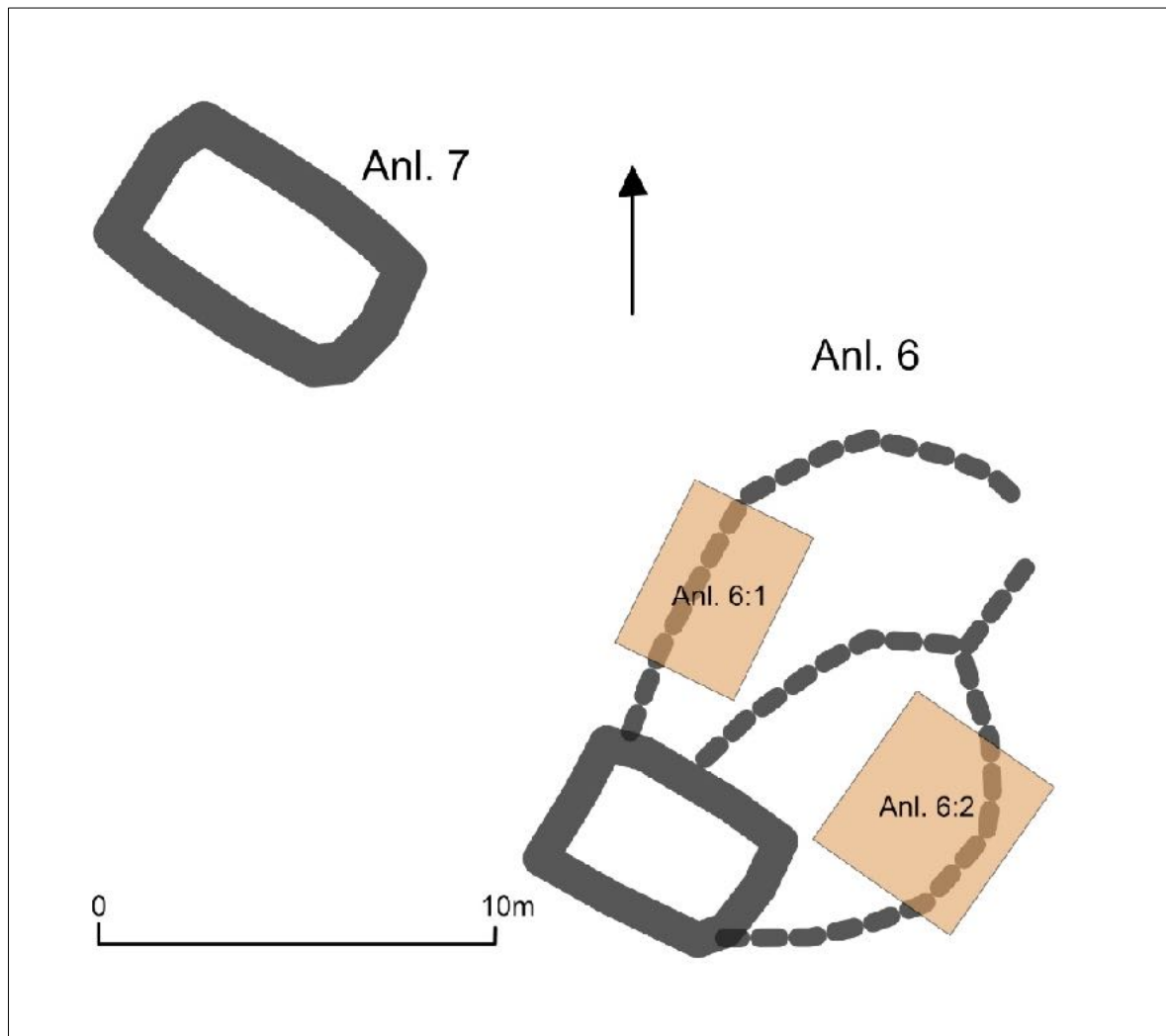


Figure 88. Vertical plan of facility L2021:1494, constructions 6 & 7. The two excavated areas (6:1 & 6:2) can be seen intersected by the stone ramparts.



Figure 89. Oblique photo of facility L2021:1494, construction 6:1, before de-turfing.



Figure 90. Oblique photo of facility L2021:1494, construction 6:2, before de-turfing.



Figure 91. Oblique photo of facility L2021:1494, constructions 6:2 in the foreground and 6:1 in the background, after de-turfing.



Figure 92. Vertical plan of facility L2021:1494. Construction 6:1 is a linear stone packing that may be a kind of rampart. Construction 6:5 is a stone packing in the southern corner where a nail (F26) was found. A fibula dated to the Migration Period (F25) was found next to the trench.

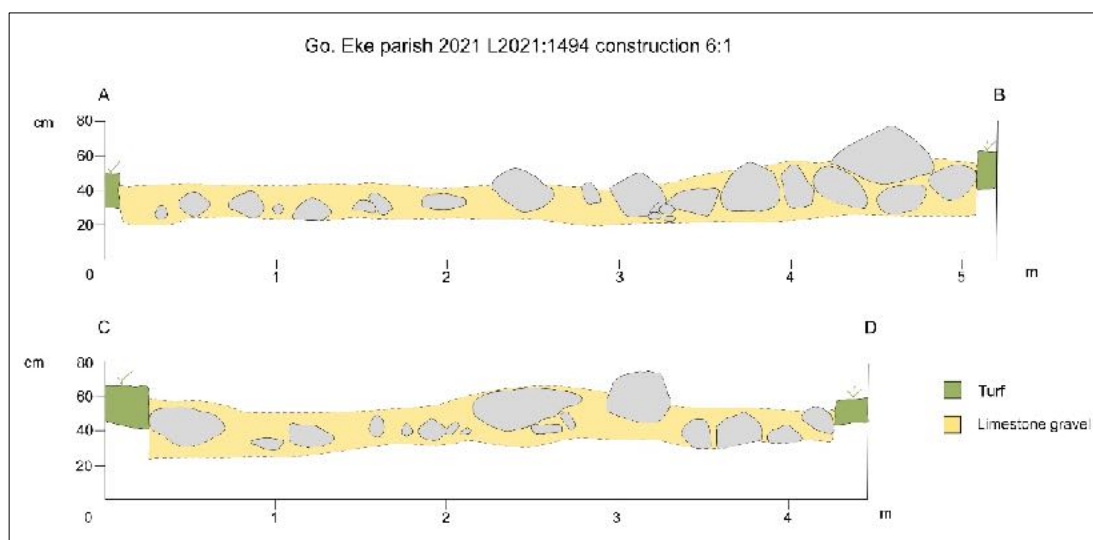


Figure 93. Profiles of facility L2021:1494 constructions 6:1. Profile A-B is oriented towards the south-east while profile C-D is oriented towards the south-west.



Figure 94. Bronze fibula (F25) dated to the 5th century AD (Migration Period). Found next to construction 6:1.



Figure 95. Detail of hearth, facility L2021:1494 construction 6:4.

Go. Eke parish. 2021. L2021:1494. Construction 6:2, 6:3 and 6:4, lager II.



Figure 96. Vertical plan of facility L2021:1494. Construction 6:2 is a linear stone packing that may be a kind of rampart. Construction 6:3 is a stone packing in the south-west corner. Construction 6:4 is a hearth in which burnt stones, charcoal (27) and a few burnt bones(F29) were found.

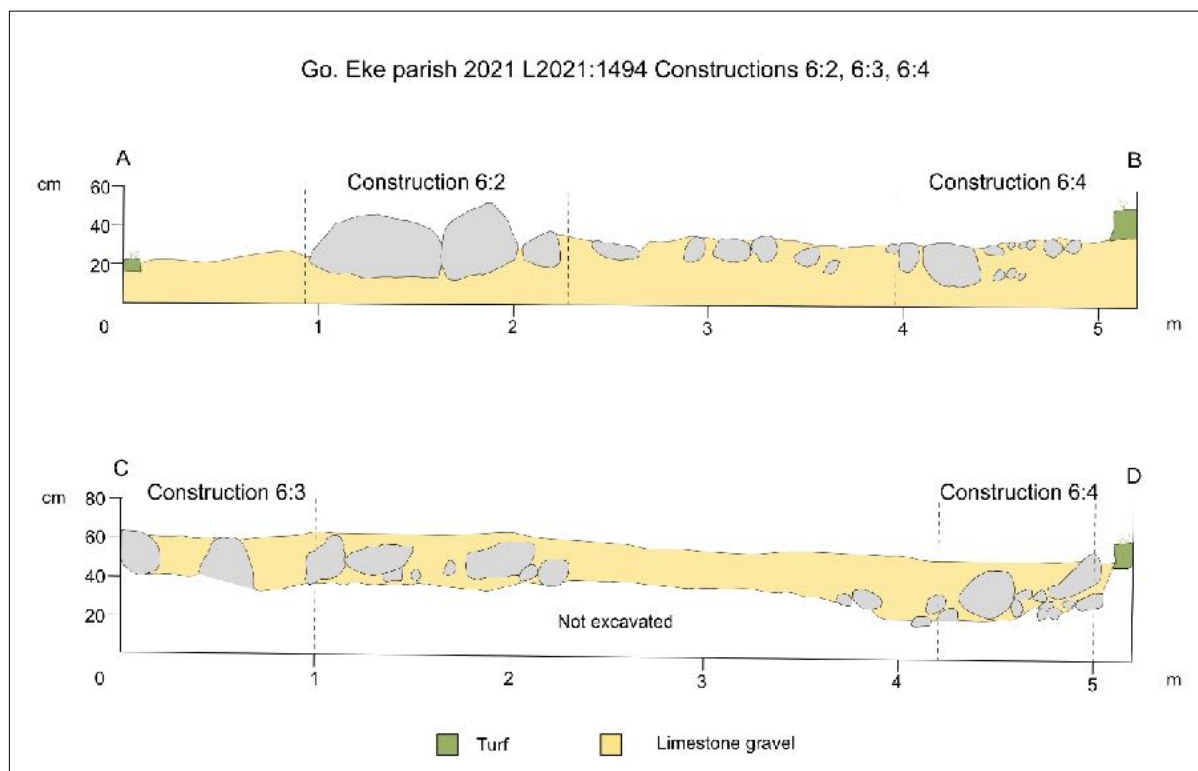


Figure 97. Profiles of facility L2021:1494 constructions 6:2, 6:3, and 6:4. Profile A-B is oriented towards the north-east while profile C-D is oriented towards the south-east.

Ancient monument, Eke parish, L2021:1494

Construction no.	8
Coordinates	SWEREF 99TM, N 6340462, E 707574
Type	Terrace edge
Size	7 m long (NW-SE)
Form	
Above sea level	
Situation	Along the eastern side of a ridge from Gudings castle to the south
Analyses	

Description:

A 7-meter-long shaft in the northwest-southeast direction was excavated along the eastern edge of a north-south ridge. Along the shaft edge are several larger stones that are just over one meter apart. The size of the stones is about (0.2–0.3 m). The surface is covered with turf and vegetation. After de-turfing, a layer of about 20 cm, several stones appeared, some of which form a second layer of stone in the terrace edge. The excavation continued to approximately 25 cm below the surface and with a width of the trench being about 0.5 m. There are several stones, unevenly distributed, which appear to have collapsed from the edge of the terrace. The stones vary in size from 0.1–0.7 m.

There were no findings during the investigation, nor any charcoal.

Interpretation:

The edge of the terrace forms a boundary between the ridge to the west, on which there are several remains with unclear function in the form of plots, and a low-lying area to the east. The area to the east of the terrace edge is a low-lying area, almost completely stone-free, which suggests that the terrace edge formed a boundary to a body of water in the east during the late Bronze Age to the Early Iron Age. The terrace may have served both as a place to pull up smaller boats and as a cleared surface for seine fishing. The level of the ancient shoreline east of the terrace edge is currently about 3.7 m above sea level.

Illustrations:



Figure 98. Oblique photos of facility L2021:1494, construction 8. The terrace after de-turfing and cleaning. Picture taken from the south on the left and from the north on the right.



Figure 99. Profile of L2021:1494, facility 8. The terrace is shown from the south-east (left) towards the north-west (right).

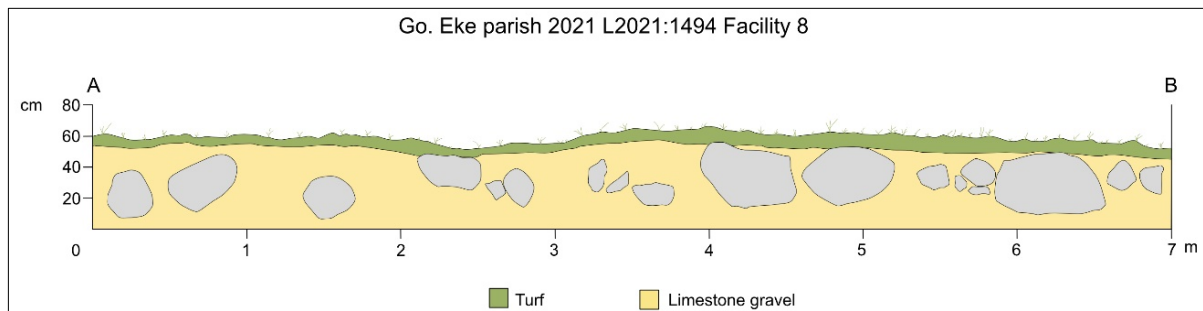


Figure 100. Profile of L2021:1494, facility 8, oriented towards the west.

Ancient monument, Eke parish, L2021:1494

Construction no.	9
Coordinates	SWEREF 99TM, N 6340474, E 707563
Type	Sunken road (hålväg)
Size	ca. 20 m (E-W)
Form	Slightly concave
Above sea level	
Situation	On the east side of a ridge, leading down to a low laying area
Analyses	

Description:

A trench measuring 1 x 3 m was laid out across the presumed hollow road / boat landing in a northwest-southeast direction. The facility is covered with grass and moss with single stones, 0.2–0.3 m in size, visible on the ground, especially on the north side. In the middle of the trench, slightly offset from the south, there is a 1.5 m wide bowl-shaped depression with small elements of stone.

After de-turfing and cleaning, clear stone packings appear on both sides of the depression. The stones of each packing differ in size. On the south side of the depression, there is a dense packing of 0.1–0.2 m large stones, while the stone packing on the north side consists of 0.4–0.7 m large stones. Between the stone packings, almost in the middle of the trench, is a stone-free area of just under 1 meter. At the southern side of the northern packing there is a larger stone, ca. 0.6 x 0.6 m. During the continued excavation, stones also appear in the central part of the facility, 0.1–0.2 m in size. These can largely be seen as natural. No other constructions are found on either side of the depression. No objects or charcoal are found, which makes the dating of the facility uncertain.

Interpretation:

The facility should nearest be interpreted as a hollow road leading from the higher elevation and existing facilities to the west down to the east and the lower-lying area which is partly stone-free. The southern of the two stone ramparts surrounding the probable hollow road continues to the east on a stretch of about 20 meters. It appears here as a single-layered, sparse row of 0.3–0.6 m large grey stones.

The facility should be interpreted, by all accounts, as a hollow road. Its function and dating are most likely associated with the ancient remains located on the north-south running ridge.

Illustrations:



Figure 101. Oblique photo of facility L2021:1494, construction 9, taken towards the south-east.

Go. Eke parish 2021. L2021:1494. Construction 9

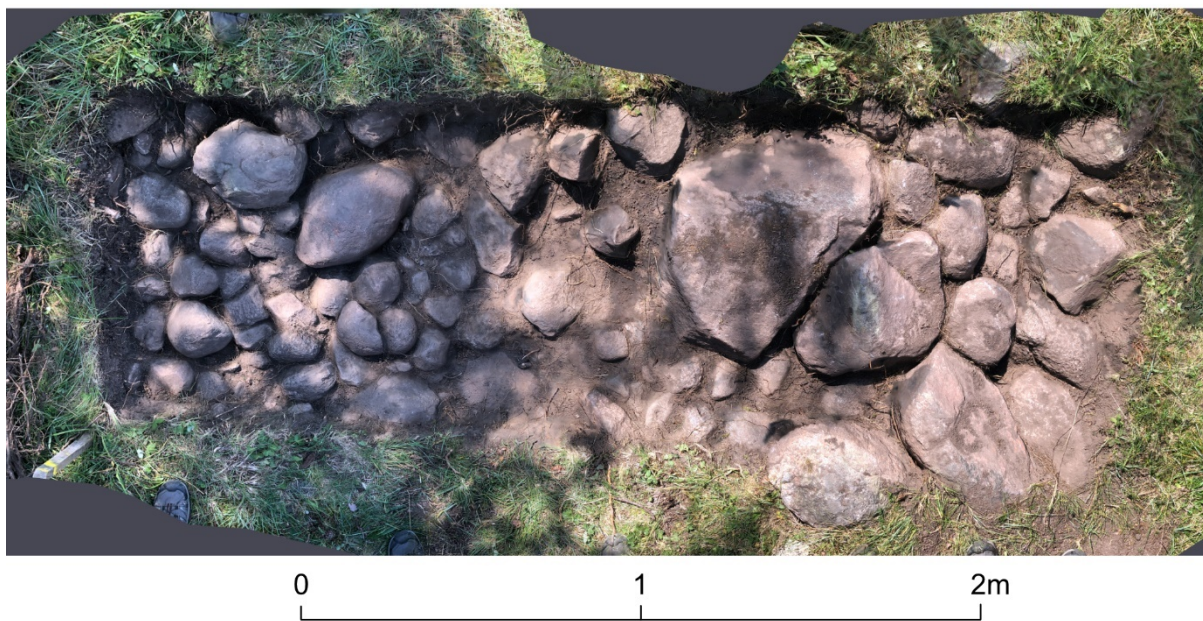


Figure 102. Vertical photo of facility L2021:1494, construction 9.

Ancient monument, Eke parish, L2021:1495

Construction no.	1
Coordinates	SWEREF 99TM, N 6340287, E 707243
Type	House construction
Size	4 m x 4 m (N-S)
Form	Square
Above sea level	
Situation	
Analyses	Sheep's tooth for C14 dating gave the value BP 508±30, correlated to AD 1330-1448

Description:

The facility is located inside the northern wall of Gudings castle, just to the west of a possible entrance. Before de-turfing, the area appeared as a roughly square shaped packing of stones ranging from large (0.3–0.4 m) to medium (0.2–0.3 m) in size. Only the tops of the rocks around the edge were visible through the turf. The centre of the facility appeared empty and slightly depressed.

Layer I

After de-turfing and cleaning, it became apparent that the stone packing continued through the centre of the facility. The north-east corner contained a large flat stone that was unlike any of the other stones. There was a roughly oval shaped depression on the eastern side of the facility where the stones were more dispersed. A tree stump located on the eastern edge of the facility could be the cause of the depression with the roots having displaced some of the stones. On the southern edge there is a small mound that may continue further past the border of the trench.

Layer II

Further investigation was made of the depression located on the eastern side of the trench. A section of large stones running from east to west across the depression was left intact to serve as a profile while the areas of the depression to the north and south were excavated further. The soil was removed from between the stones on the surface until a layer of smaller stones was encountered underneath. The larger stones on the surface were removed and excavation continued through a layer of smaller stones until a layer of gravel was reached. The gravel layer was dug to a depth of approximately 5-6 cm. No finds or cultural layer were found. A profile was made of the facility facing toward the north and including the remaining section of the depression. Photographs were taken of the profile and the entire facility. The facility was restored by returning the excavated stones, gravel, and soil.

Interpretation:

The facility appears to be some kind of structural remains, however this could not be confirmed from our excavation. The stones ranged in size from large (0.3–0.4 m) to small (0.1 m or less) and were unevenly dispersed across the facility. Most of the larger stones were located on the outer edges of the facility, but most notably on the west and south sides. No clear shell wall could be noted. The sheep bones is probably not connected to the construction

Find Material:

Find no:	Description
30	Sheep's tooth
Sample no:	Description
1	Sheep's tooth for C14 dating

Illustrations:

L2021:1495. Layer I



Figure 103. Vertical photo of facility L2021:1495 after de-turfing.

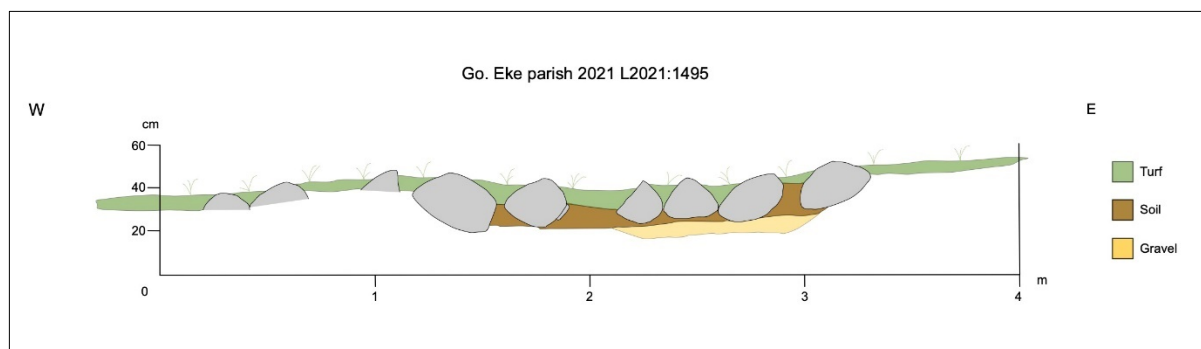


Figure 104. Profile of facility L2021:1495 oriented towards the north.

Ancient monument, Eke parish, L2021:1504

Construction no.	1
Coordinates	SWEREF 99TM, N 6340321, E 707687
Type	Grave
Size	11 m x 5 m (NW-SE)
Form	Almost Rectangular
Above sea level	3.25–3.45 m
Situation	Forms the end of the ridge with numerous remains that stretch from Gudings castle to the south. The area south of the facility is rather low-lying and with a measured height of 3.6 meters above sea level.
Analyses	¹⁴ C analysis of the burnt bones from construction 1:1 gave the value BP 1608±29, correlated to AD 415-540.

Description:

The facility is visible before de-turfing as an almost oval construction, consisting of two almost parallel rows of stones, approximately 3 meters apart, can be seen through the turf in the southern area of the trench. The eastern row of stones is fairly clear and consists of 0.4-0.6 m grey stones, while the western row consists of slightly smaller stones that are more diffuse and have slightly sparser areas between them. The exact end of the stones in the north is unclear, as is exactly which stones can be said to be included in the southern part. Together, the rows of stones form a shape resembling a ship-like formation.

Towards the north of the construction there is a clear height with a fairly dense, but turf-filled stone packing of 0.2-0.4 m grey stones. The northern boundary of the facility appears to be rounded before de-turfing. Central to the northern area of the trench is a large pine tree, which significantly affects the facility.

After de-turfing, the rows of stones in the southern area of the trench of the examined surface appear more clearly because the area in between them is largely stone-free, with only a few smaller stones. In the middle of the facility there is now a more compact stone layer with medium-sized stones (0.3-0.4 m) adjacent to one of the larger stones in the eastern row of stones that delimits the construction. Around the large stone that marks the end of the eastern row of stones, there is a packing with smaller stones (0.1 m) within an approximately 70 cm wide area around the stone, except in the far east. The facility was documented in plan and with a profile. There were no clear traces of construction, so the stone packing cannot be seen as a separate facility.

Central between the two rows of stones is a clear circular construction, consisting of 0.3-0.6 m large grey stones with smaller stones within the delimited surface. The stone circle is

approximately 2 meters in diameter and houses a hint of brittle stones within the facility. Under this stone layer, a clear and well-defined layer emerged with burnt bones within an area of approximately 25 cm in diameter and with a thickness of about 5 cm. A total of 111 grams of very small burnt bones were found, including many tubular bones and a couple of cranium fragments. The osteological analysis of the bones shows that they are primarily animal bone, a smaller animal, probably a dog. In addition, there are two skull fragments, likely human. In addition to burnt bones, a very small amount of charcoal was found inside the construction.

In the northern part of the facility, which was not examined but only turfed and cleaned, there appears to be another circular facility (facility 2).

In addition to the bones and charcoal from the central construction (1:1), a lance, preserved to a length of about 14.5 cm, was found in the eastern row of stones. It was standing almost vertically between the stones with the tip pointing upwards. The shaft of the lance appears to have been broken, but no other fragments of it were found in the immediate area. No other objects or definite structures could be noted within the investigated area. The northernmost part is not examined to the bottom but only de-turfed up to the back of the large pine that stands here.

Interpretation:

The construction as a whole is very difficult to understand, with elements of apparently less delimited facilities. The general impression is that there are two longer rows of stones, located about 3 meters apart and to a length of 11 meters, which form an almost ship-like structure. Within this surface there is a round facility consisting of larger grey stones that surround a surface with some brittle burnt stones and a layer of burnt bones. The osteological analysis shows that it is apparently human bones and bones from a smaller animal, probably a dog.

The northern part of the facility, which has not been excavated since a large tree is located here, possibly houses another construction similar to the one examined with burnt bones. It appears, after the de-turfing, that there are at least two layers of stone on top of each other. Whether this is a grave cannot be determined at present, but there is much to suggest that this is the case, probably of the same nature as facility 1.

Find Material:

Find no.	Description
31	Animal bone, ca 2x1 cm.
32	Lance, ca 14.5 cm long, shaft broken
33	Charcoal from construction 1:1
34	Burned bone fragments from construction 1:1, 111 gr in total. Sample submitted for C14 dating.

Illustrations:



Figure 105. Oblique photo of facility L2021:1504 after de-turfing. Picture taken towards the north.

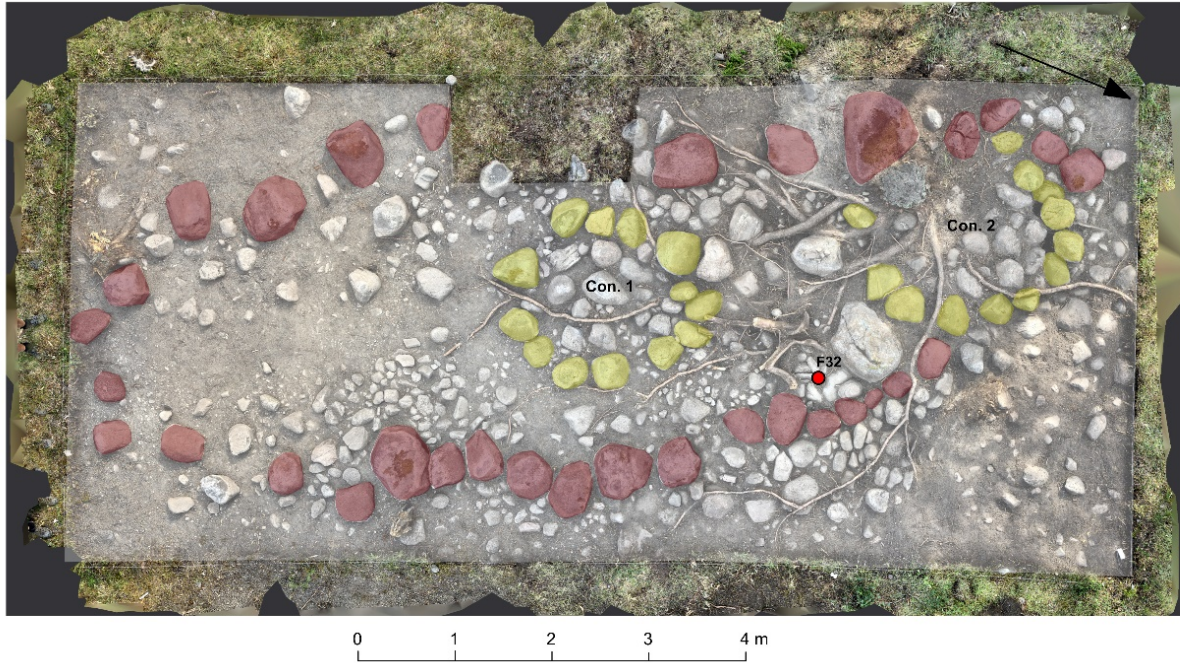


Figure 106. Vertical plan of facility L2021:1504. Constructions 1:1 and 1:2, highlighted in yellow are circular stone packings. Burnt human and animal bones (F34) and charcoal (F33) were found in construction 1:1. A vague ship form, highlighted in purple, is created by the large outer stone rows. The end of a lance (F32) was found wedged vertically between the rocks with the tip pointing upwards.

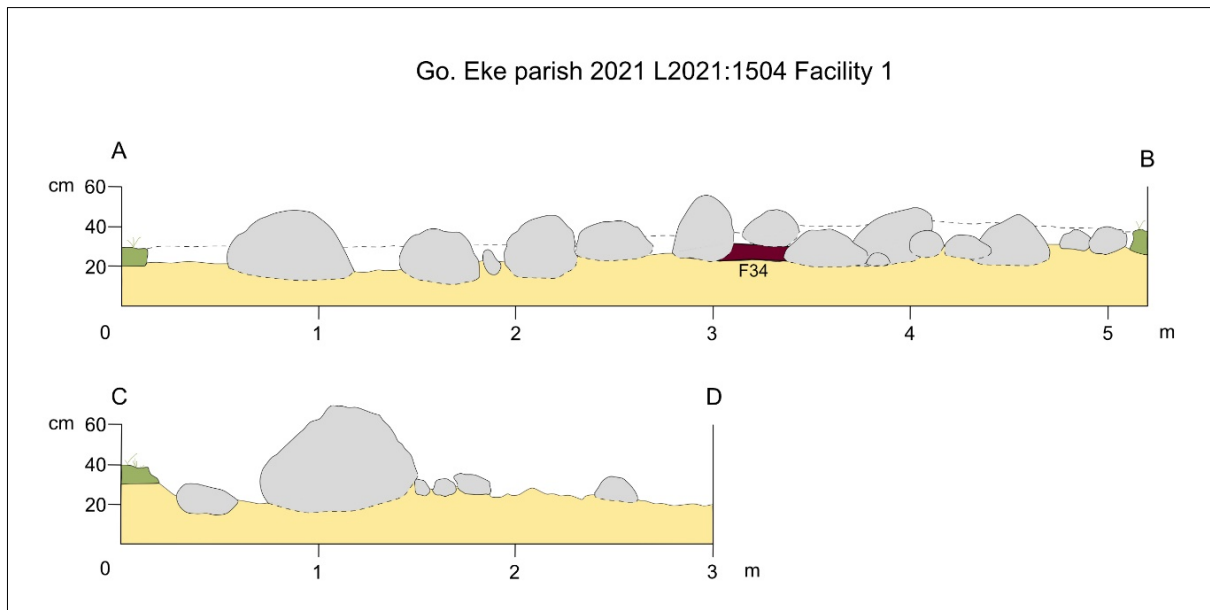


Figure 107. Profiles of facility L2021:1504, construction 1:1, both oriented towards the north. The burnt bones (F34) can be seen in profile A-B.

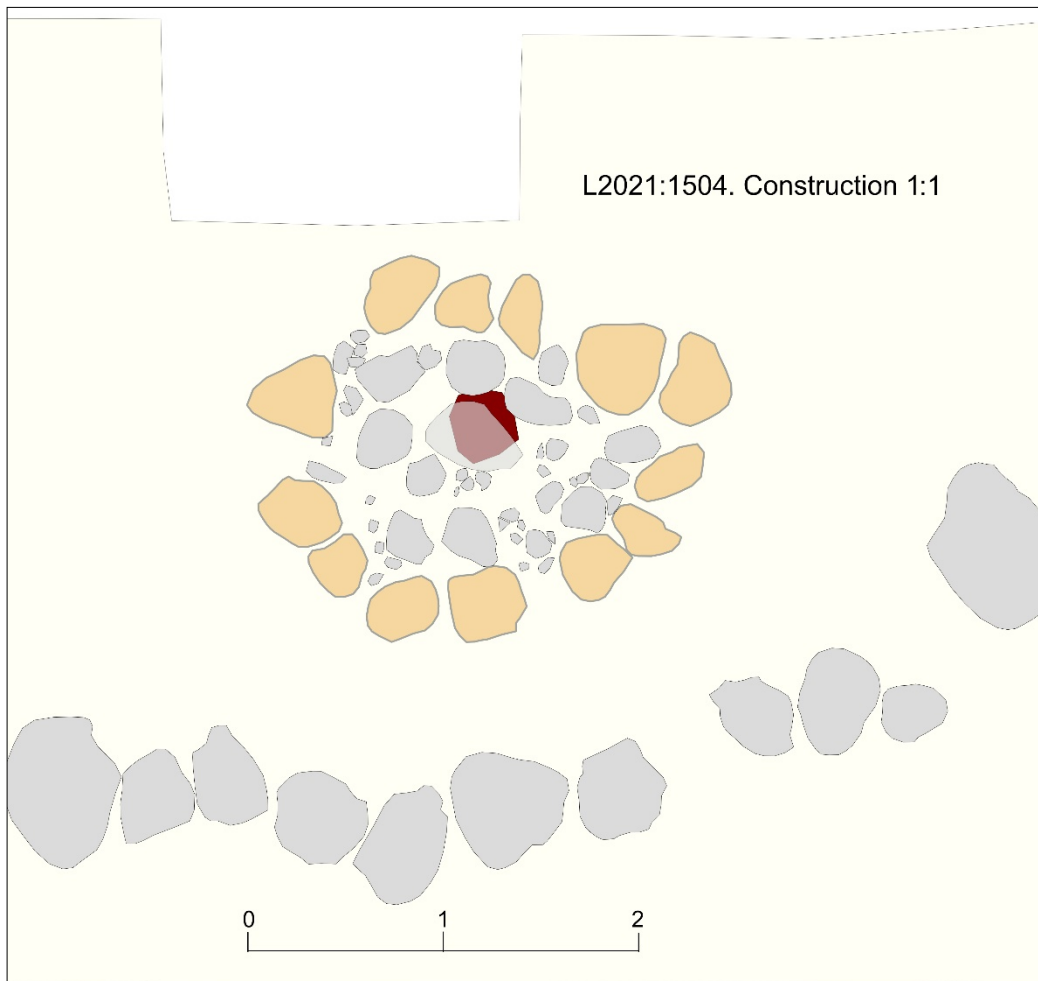


Figure 108. Vertical plan of facility L2021:1504, construction 1:1. The red area in the center of the construction indicates the location of the burnt bones found underneath the overlaying stone.



Figure 109. Human cranium fragments (F34). Burnt human bones were found mixed with burnt animal bones in construction 1:1.



Figure 110. Lance (F32) photographed in situ. Found wedged vertically between the stones.



Figure 111. Lance (F32). The lance appears to be broken at the shaft (right side).

Fyndlista Projekt The Connecting Point 2021, Ist dnr. 431-1662-2021

Diarie_nr	Socken	Fastighet	RAÄ nr	ruta square	Lager layer	Anl nr construct. nr	Fynd nr find nr	Sakord/object	Undertyp type	Material	Ant ex	Vikt (g) weight	Length mm	Width mm	Height mm	Thickness (mm)	Diameter (mm)	Dating	Comments
431-1662-2021	Eke	Gudings 1:3	L1977:4153		III	7	1	Keramik				429	60	42		11			små fragment, förmodligen inte ett fullt kärl
431-1662-2021	Eke	Gudings 1:3	L1977:4153		III	7	2	Slipsten	Bryne	Sandsten	1	12	58	21		5			hål i ena änden
431-1662-2021	Eke	Gudings 1:3	L1977:4153		III	7	3	Ben	Får tand		1	0,5							
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	4	Ringspänne	Pennanular Brooch	Brons	1	98		12		6	80	Vikingatid	trattformiga ändknoppar, bandformig nål, cirkeldesigner på nål och ändknoppar,
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	5	Bältesspänne		Brons	1	10,7	67	22		5			textil eller läder fäst
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	6	Textilfragment		Okänd									hittat fäst vid ringspännen
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	7	Möjlig del av sheath		Brons/ Läder	1	22	31	17		4			rektangulärt bronsstycke med nitar, läder mellan bronsark
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	8	Kniv		Järn	1	29	125	12		6			kraftigt korroderad
431-1662-2021	Eke	Gudings 1:3	L1977:4153		IV	7,2	9	Okänd		Möjlig organisk material							38		tunt okänt material som omsluter cylindrisk formad jord
431-1662-2021	Eke	Gudings 1:3	L2021:1494			1	10	Hästkosöm			1	4,5	26	6		2			
431-1662-2021	Eke	Gudings 1:3	L2021:1494		II	1	11	Benbitar			1	110	45	22		11			
431-1662-2021	Eke	Gudings 1:3	L2021:1494		II	1	12	Benbit			1								ingår i 11
431-1662-2021	Eke	Gudings 1:3	L2021:1494		II	1	13	Benbit			1								ingår i 11
431-1662-2021	Eke	Gudings 1:3	L2021:1494		II	1	14	Benbitar											ingår i 11
431-1662-2021	Eke	Gudings 1:3	L2021:1494		II	1	15	Benbitar											ingår i 11

431-1662-2021	Eke	Gudings 1:3	L2021:1494			4	16	Kol											Utgår. Used for C14.
431-1662-2021	Eke	Gudings 1:3	L2021:1494		I	5	17	Hästkosöm		Järn	1	3	17	9		9			del av hästkosöm
431-1662-2021	Eke	Gudings 1:3	L2021:1494		I	5	18	Ben			1	2	70						
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5;4	19	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5;4	20	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5	21	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5	22	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5;1	23	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	5;4	24	Kol											Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494			6;1	25	Fibula		Brons	1	13	55	20	27			ca. 400 AD	trasig fjäder
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	6;5	26	Spik		Järn	1	9	35	20	18				
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	6;4	27	Kol			10	1							Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494		III	6	28	Kol			20	2							Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1494			6;4	29	Bränt Ben				1							
431-1662-2021	Eke	Gudings 1:3	L2021:1495		I		30	Ben	Får tand			4.5							Utgår. Used for C14.
431-1662-2021	Eke	Gudings 1:3	L2021:1504			1	31	Ben			1	0,9	24	9		2.5			
431-1662-2021	Eke	Gudings 1:3	L2021:1504			1	32	Lansspets			1	60	160	27		3			
431-1662-2021	Eke	Gudings 1:3	L2021:1504			1,1	33	Kol				9							Utgår
431-1662-2021	Eke	Gudings 1:3	L2021:1504			1,1	34	Bränt Ben				111							
431-1662-2021	Rone	Mattsarve 1:20	L1975:1157		I		35	Tand & Ben	Maxilla & M3		1	26	44	26		16			Utgår. Used for C14
431-1662-2021	Rone	Mattsarve 1:20	L1975:1157		II & III		36	Flinta				4							
431-1662-2021	Grötlingbo	Ronnings 1:3	L1976:750	3.2	II		37	Tand			1	8	40						Utgår, Delar av tand, Nöt. Used for C14.

431-1662-2021	Eke	Gudings 1:3	L1977:4153		I	8	38	Hästkosöm			1	5	27	15		5			
431-1662-2021	Eke	Gudings 1:3	L2021:1494			5	39	Ben	Får ben		1	10	98	10		9			

The Connecting Point

Osteological analysis of the bone material from Eke parish (i.a.)

Summer 2021, investigations Arendus/ Associate Professor Dan Carlsson

EKE Parish

Ancient monument, L1977:4153

Facility 7.1

115 grams. Highly fragmented pieces of skeleton, apparently from cranium and long bone of an arm (likely humerus). Some of the largest bone fragments are from the cranium. There are about ten teeth, none attached to any part of a mandible or maxilla. Erosion of the teeth indicates an approximate age between the years of 35-40. No signs of calculus or caries could be detected. A molar from the mandible was submitted for an analysis, as well as a sample of the corpus on the humerus.

Facility 7.2

Complete but very fragmented skeleton. In general, the bone material is dark and well-preserved, but due to the taphonomic effects of the large number of stones that were placed on top of the skeleton, there are few parts that exceed 5-6 cm in size. Most information has been retrieved from the dental material.

Only one tooth, the wisdom tooth in the right lower jaw half (48), but there are also about ten loose teeth, some of which can be placed in the mandible. The first two molars on the right side (16 and 46) are very obliquely worn, probably due to the fact that these were used as "tools" or that something was held tight or drawn over the surfaces of the teeth. One of these teeth from the lower mandible (46) is clearly coloured green, it seems it has come loose from the jaw and ended up next to the ring buckle. A severe caries attack is found on a premolar (45?). An extreme amount of calculus occurs on some of the teeth. Traces of mild abscess (exudate formation due to an infection at the root of the tooth) at the posterior tooth in the left lower jaw half, probably 37 when the wisdom tooth (38) is either not formed or lost ante mortem, the jawbone is porous but without traces of alveolus.

A lot of skeletal changes are postcranial. These mainly



consist of osteophytes in joint ends and muscle attachments all over the skeleton, for example in the spine, on the shoulder blades and on the back of the femur and tibia. A rather serious change was noted on a joint surface of a cervical vertebrae, where this was worn out by lying directly against the next vertebrae joint.

In the area where the skeleton's upper body was located, a small ball-shaped stone, about 11 mm in diameter, was recovered. This could be a kidney-or a gallstone.

Sex determination: The only suitable characteristics for sex determination in the skeleton are detected from the cranium, where these indicate the individual to be a male. The two post-cranial measurements that could be taken (see below) also confirm this.

Age determination: The only, although uncertain, method that could be applied to estimate the approximate age of this individual at the time of their death is to analyse the erosion of the teeth. This indicates that the person was in their 40s, but due to the severely worn molars, this can not be stated with full certainty. However, the individual is evidently an adult, and the detected osteophytes as well as other skeletal changes are most often encountered in older individuals. Therefore, a reasonable estimate is that the age at death of this individual was between the ages of 40 to 50.

Body length: Due to the fact of the skeleton being so highly fragmented, no reliable measurements for the height determination could be taken. An approximately smallest measurement of the maximum femoral length that was taken in situ, however, was ca 48 cm which would indicate an approximate body length of 176 cm.

Measures:

Left femoral head, diameter: 49 mm

Right shoulder blade, joint end towards humerus, height: 40 mm

Molar 2 mand dx (47) submitted for analysis.

In the area where the skeleton's upper body was located, a small ball-shaped stone, about 11 mm in diameter, was recovered. This could be a kidney or gallstone. Some animal bones are also recovered from the grave, mainly from a smaller bird, but also a fish vertebra (figures below).



Figure x. The bones of a small bird, found close to the head.



Figure x. A small stone from the area of the upper part of the body. b

Ancient monument, L2021:1495

Fnr 30

4 grams. A molar of sheep.

Ancient monument, L2021:1504

Fnr 31 Construction 1

<1gram, ca 2,5 cm. 1 fragment, animal bone

Fnr 34 Construction 1

Burnt bone

Ca 2 dl, 96 grams. Mainly white-burnt, generally 0.5-2 cm large fragments. Several parts of tubular bones with a small diameter, not likely human but rather one (or more) smaller animals. A pair of joint ends without traces of ongoing or completed fusion indicates an adult individual.

However, two cranial fragments, one of which is burnt black, both about 2 cm in size, probably originate from humans.

Ancient monument L2021:1494

Fnr 11-15 Construction 1

48 grams, ca 35 fragments, 0,5-7 cm large. Pieces of long bones, likely human femur and tibia.

Fnr 18 Construction 5

2 grams, 1 fragment ca 7 cm. A piece of tubular bone from an animal.

Fnr 39 Construction 5

9 grams, 1 fragment ca 9 cm. Metacarpal or -tarsal bone of a juvenile sheep.

RONE Parish

Ancient monument L1975:1157

22 grams, ca 5 cm. Molar of a cattle.

GRÖTLINGBO Parish

Ancient monument L1976:750

7 grams, pieces of a cattle tooth.

Visby 2021-08-04

Petter Åkeson

C14 prover Eke 2021

Prov	Fornl	Anl	Beksrivning	Koordinater	Dating BP	Korrelerade värden
2021:2	L2021:1494	1	Bone from anl. 1:1. Human bones. Group 4. Eke	N 6340474, E 707551	1932±29 [*]	AD 23-203
2021:7	L2021:1494	4	Charcoal from the bottom of the construction. Group 3. Eke	N 6340452, E 707575	1742±29	AD 244-402
2021:1	L2021:1494	5	Charcoal from fireplace along the eastern longside in the construction. Eke	N 6340398, E 707627	1316±29	AD 655-707
2021:5	L2021:1494	6:4	Charcoal from fireplace/group. Eke	N 6340374, E 707682	1253±29	AD 673-876
2021:6	L2021:1504	7:1	Burnt bones from grave. Eke	N 6340326, E 707689	1608±29	AD 415-540
2021:3	L1977:4153	7:2	Metatarsal right. Foot bone skeleton (nr 2). Eke	N 6340431, E 707465	899±29 [*]	AD 1044-1218
2021:4	L1977:4153	7:1	Arm bone from the very fragmented skeleton. Eke	N 6340431, E 707464	327±37 [*]	AD 1475-1644
2021:10	L2021:1495	1	Tooth of sheep from house inside Gudings slott. Group 2. Eke	N 6340497, E 707401	508±30	AD 1330-1448
2021:8	L1976:750	1	Cow tooth, construction in Grötlingbo	N 6337651, E 705237	Prov 8 was of bad quality and could not be dated.	Utgår
2021:9	L1975:1157	1	Cow tooth, construction in Rone	N 6341601, E 709671	1178±33	AD 774-974

(*) Ca

Graves between Migration period and Viking period. Instances from Eke

Alice Rosa Brusin

The island of Gotland in Sweden offers a good sample for the analysis of the changing in ritual and orientation of the burials: practices as inhumation and cremations sometimes coexist, sometimes one of the two is preponderant. Inhumation graves allowed us to observe the shifts of the alignment of the burials, custom that was probably connected to changes in beliefs and rituals.

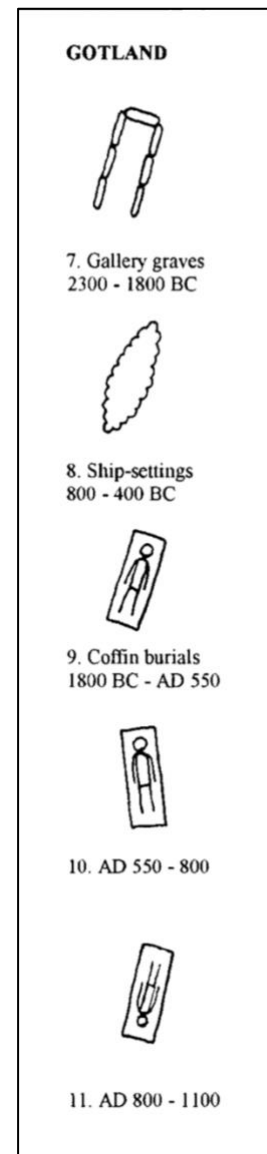
In particular will be taken as an instance seven graves, belonging to Migration Period and Viking Age, all of them excavated in recent years in Eke parish.

The choice to dispose an inhumation grave following a particular and not a random orientation could be derived from determinate religious or social beliefs, but the researches regarding this argument are still few¹.

As long as a deceased is buried in a grave, a symbolic connection is established with the surrounding landscape; many factors can influence the disposition of the burial, like the existence of other graves in a cemetery, other existing monuments, celestial bodies, social and personal aspects of the defunct².

H. J. Rose distinguishes two different kind of ways to choose the disposition of the grave: the celestial orientation, in which the rule is to follow a cardinal point, and the terrestrial orientation, «in which the body faces some point, real or imaginary, near or far, on the surface of the earth³»

Generally Norse pagan burials follow a N-S orientation⁴, but inside this macro classification is possible to discern different alterations.



*Fig. 1 – Mean orientation of graves in Gotland, north upwards.
From Linström, p. 117.*

¹ Zugaiar 2012, p. 6.

² Kurila 2013, p. 39.

³ Rose, 1922, p. 128.

⁴ Zugaiar, 2012, p. 6.



Figg. 2, 3 – Skeletal remains of Facility 29, from the excavation of Gudings slott of 2018. Drawings by the author.

On Gotland the graves from 2300 BC to 1100 AC generally follow the axis align to NNE- SSW direction, although during the period included between 550 AD and 800 AD the main trend seems to be to follow N-S and NNW-SSE directions⁵.

The graves in Eke are included in this pattern, but an important change occurred between Migration period and Viking Age: while in the Migration period burials the head of the dead is the North edge of the grave, in the subsequent burials belonging to Viking Age are positioned in the opposite direction. The body is aligned on the direction S-N, with the head positioned in the South margin.

1. Description of the burials in Eke

The burials studied accrue from the excavations in Eke parish from the years 2018, 2019 and 2021 by Gotland Archaeological Field School, specifically in the area of Gudings Slott and Smis.

The excavation taken in 2018 brought to light a grave containing two construction with skeletons partially preserved, which have been nominated with the numbers 29a and 29b.

Construction 29a kept the body of a man of approximately 40 years old, buried with grave goods such a knife and a decorated bronze belt buckle; the head was positioned to the south and the feet to the north⁶. The other construction (29b) hosted instead a skeleton identified by the osteological analysis belonging to a woman of about 50 years old⁷. The orientation of the body was NE-SW, with the head in the SW edge; together with the body a box brooch, two bronze

⁵ Lindström 1997, p. 116.

⁶ Carlsson 2018, pp. 33, 34.

⁷ Knapp 2021, p. 18.

Go. 19 Eke parish
Gudings 1:3
RAÄ 49:2
Construction 12:3
Layer III
Skeleton III



Go. 19 Eke parish
Gudings 1:3
RAÄ 49:2
Construction 12:2
Skeleton II



Figg. 4, 5 – Skeletal remains from Facility 12, from the 2019 Excavation in Gudings slott. Drawings by the author.

decorative pins and a knife have been found. The typology of the artefacts and the disposition of the bodies identify the graves as belonging to the Viking Age⁸.

From the excavation of the years 2019 three facilities contained bodies partially preserved that permitted to observe the original disposition of the defunct. Facility 12 hosted three skeletons: skeleton I was smashed and incomplete, while skeleton II was better conserved. These two graves lay on the right of the remains of another skeleton (III), placed in the middle of the facility, which was composed only by a smashed cranium and few bones of the upper part of the body, but accompanied by grave goods such as pearls, a brooch, a needle and a knife; despite the poor conservation of skeleton II and III is possible to recognize a N-S disposition of all the bodies, all of them with the head located toward south. On the basis of C¹⁴ and osteological analysis, is possible to identify skeleton III as belonging to a woman of about 35 years old alive between 864 and 992 AD, while skeleton I (uncertain gender, about 35 years old) was dated to 951-1032 AD. Skeleton II was the younger: the body appertained to a woman of 20-25 years old, lived between 1024-1156 AD⁹.

⁸ Carlsson 2018, pp. 34, 35.

⁹ Carlsson, Bokor, 2019, pp. 47, 48.

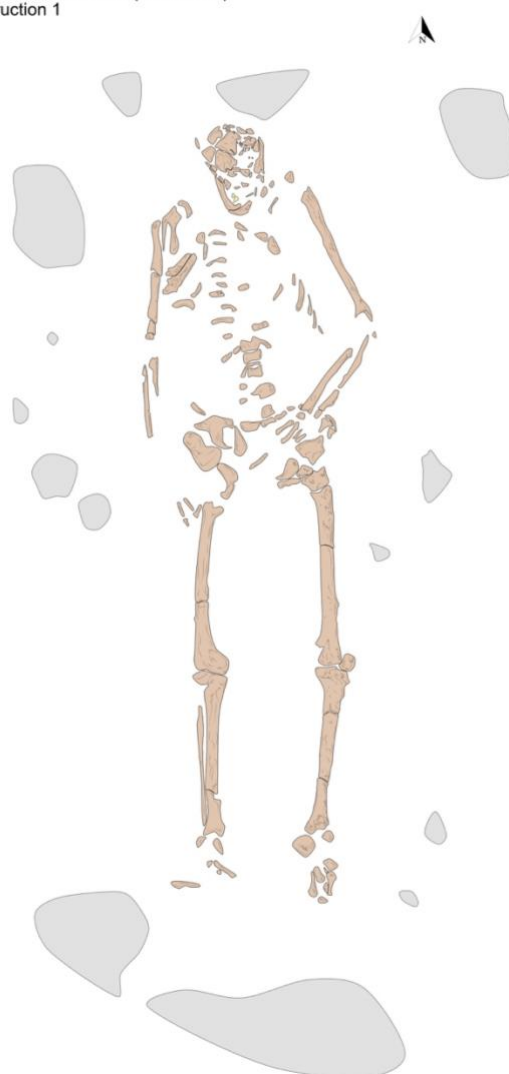
Facility 13 hosted two defuncts, the first one (Skeleton I) belonging to a woman lay on her back, accompanied by two brooches, and the second one (Skeleton II), positioned in the southern part of the facility, was identified as a man on the basis of his grave goods (a knife, a belt buckle and a ring buckle). Both the burials belonging to Viking Age but Skeleton II was older. The orientation of the bodies pursues the N-S axis, with both the heads in the southern direction¹⁰.

Another multiple burial, dated around 1000 AD, had already been excavated in the south-eastern corner of Gudings slott in 1987, which included the bodies of one man and three woman, one of them completely destroyed; the other three graves were aligned to the N-S axis with the head in the south side¹¹.

Go. 19 Eke parish
Gudings 1:3
RAÄ 49:2
Construction 13
Skeleton I



Go. Eke parish 2019
Smiss 2:1 L1977: 6082 (RAÄ 101:1)
Construction 1

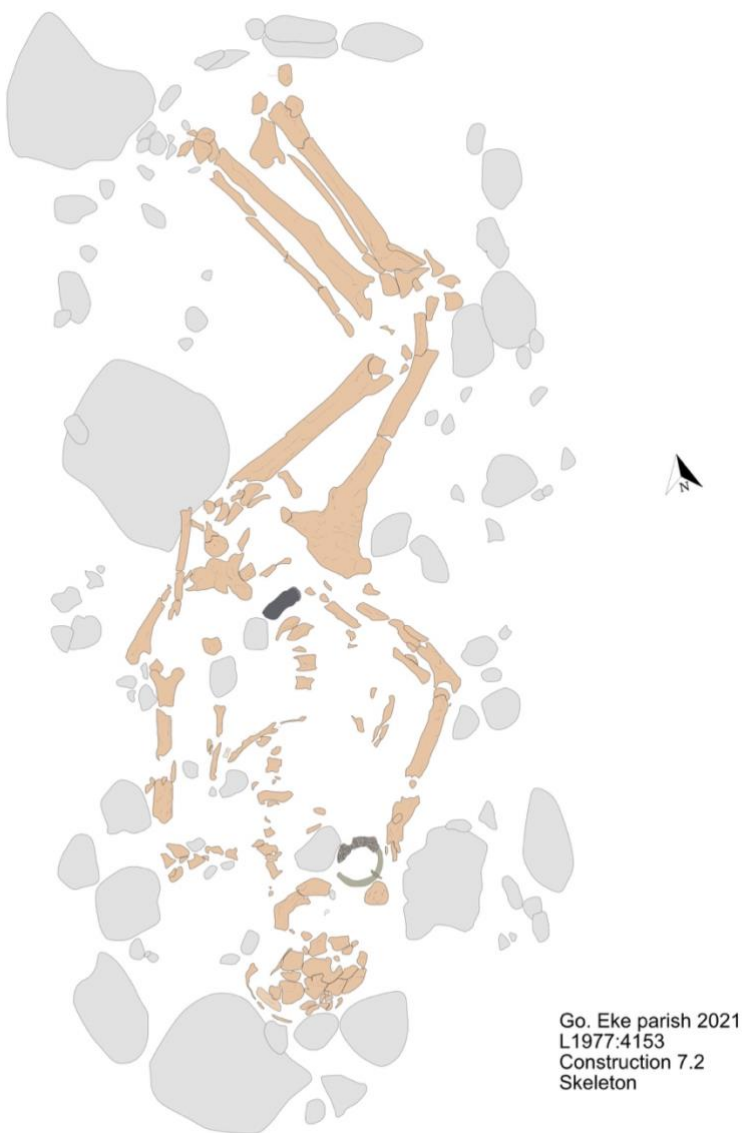


Figg. 7, 8 – Skeletal remains from Facility 13 in Gudings slott, and from Facility 2 in Smiss, 2019 Excavation. Drawings by the author.

¹⁰ Carlsson, Bokor, 2019, pp. 55, 56.

¹¹ Hegardt 1991, pp. 45, 43.

Close to Gudings slott, in Smiss 2:1, one more grave was excavated: the skeleton found in the Facility 2:1 is attributed to a man of about 20 years old, in life during the Migration Period (C¹⁴ analysis gave a range between 382 and 587 AD). The body was oriented N-S but, differently from the previously presented graves, the head was positioned on the northern direction¹². The case is not isolated on Gotland: other Migration period burials, with the same alignment on the N-S axis and the head located in the northern edge, are registered in the cemetery of Barshalder (Grötlingbo and Fide parishes, not distant from Eke parish)¹³ and in Fleringe parish¹⁴.



The most recent excavation of Gotland Archaeological Field School, held in 2021, brought to light another grave in the southern area of Gudings slott.

A large mound, called Facility 7, was excavated and it turned out to host the skeletons of two individuals: one was positioned on the eastern area of the mound and the remains consisted in fragments of the cranium and few bones of an arm. The other defunct was found in the middle of the mound in a more typical grave. The grave goods (a penannular brooch, a knife and a bronze belt buckle) of the latter seem to indicate that the person buried was a man lived during the Viking Age. The skeleton was oriented on the axis N-S, with the head positioned in the South¹⁵.

*Fig. 9 – Skeletal remains from Facility 7, excavated in 2021.
Drawing by the author.*

¹² Carlsson, Bokor, 2019, pp. 67, 68.

¹³ Rundkvist 2003, pp. 58, 59.

¹⁴ Carlsson 2015, pp. 10, 11.

¹⁵ Carlsson *et alii*, 2021, in press.

2. Possible interpretations

As can be seen from this small range of samples the orientation of the burials was not something random but accurately chosen before the deposition of the body. This implies a series of symbolic meanings can be investigated. An issue that shouldn't be forgotten is the fact that probably the conception of cardinal points was different from the modern one: Jonathan Lindström discerns three different patterns. He calls the modern conception A system; B system presents a rotation of 10°/20° degrees clockwise respect model A, while the rotation in the so-called C system reaches 50°/60° degrees clockwise. This does not mean that people in the past made errors but most probably the variation of rotation was a precise choice¹⁶.

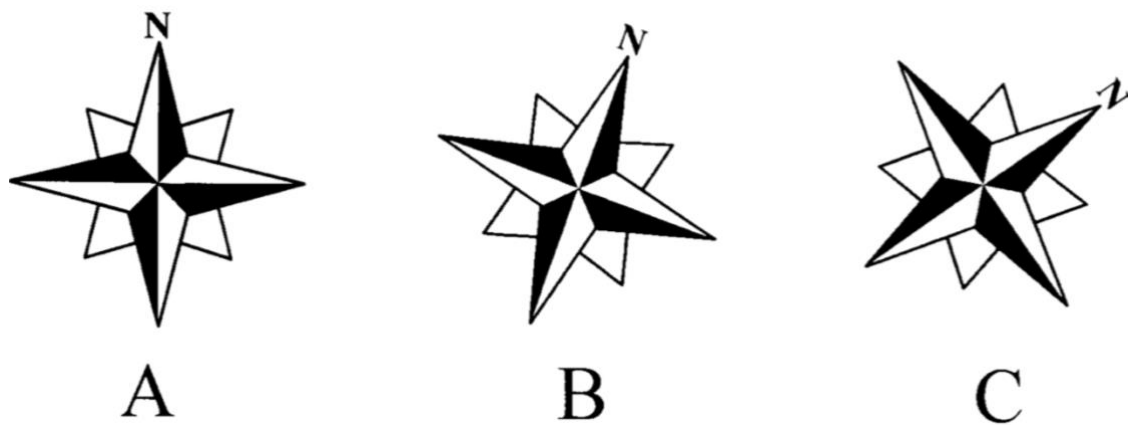


Fig. 10 – The three different conceptions of cardinal points suggested by Jonathan Lindström

2.1 In death as in life

The election of the orientation N-S could be justified in different ways. A possible explanation is that the graves were oriented in the same direction in which the houses of the settlement were positioned, so in the same way as these people used to live: this implies also the fact that the dwellings should be constructed following a particular disposition, perhaps «in which a window or door lets in the sunlight which, shining on a post or the like, forms a rude sundial, or, with the aid of certain observed points outside the house, such as hills, or simply by the angle which the light enters at noon, furnishes a sort of rough calendar. Such houses have usually the door or other openings to the south»¹⁷.

¹⁶ Lindström 1997, pp. 119, 120.

¹⁷ Rose, 1922, p. 134. See also Nilsson, 1920, pp. 20, 21.

2.2. *The road to Hel and the road to Asgard: a religious explanation*

Considering the lack of contemporary written sources, another hypothesis could be found in the mythology: the nine worlds of Norse mythology were positioned accurately in the different cardinal points, where four dwarves, called Austri, Vestri, Norðri e Suðri support the sky¹⁸. Niflheim, the world of cold, darkness and humidity was located North of the Ginnungap (the deep abyss where the nothingness was contained), while in the opposite South hosts the land of heat and the dark wood, named Muspell. East was the home of the giants, Jotunheim¹⁹. Niflheim was the reign of Hel, daughter of Loki, who was sent by Odin in that world to govern the souls of the dead²⁰.

A clear indication of the direction of this land is given in the Snorri's Edda, in the section dedicated to the death of Baldr. Hermod, one of the son of Odin, is the one chosen to undertake the journey to Helheim to offer a ransom to Hel if she let Baldr return to Asgard. During the journey he asks for information to a maiden keeper of the golden Gjoll Bridge:

«I ride to Hel in search of Baldr, But have you seen anything of Baldr on the Hel Road?»

She replied that Baldr had ridden across the Gjoll Bridge, «and down and to the North lied the Road to Hel²¹».

As long the reign of the dead lays in the North, is possible that the reign of the Æsir, Asgard, is situated in the South, giving in this way a possible explanation to the choice of the N-S axis for the burials.²² Asgard is at the same time in the middle of the world and of the sky, at the extreme periphery of space as opposed to the realm of the underworld²³. The ancient conception was that Niflheim was located down respect the other worlds, where one of the three roots of the Cosmic Tree Yggdrasill is originated. This strange conception of the cosmos can make us think about how much the perception of the opposites and the cardinal points could be.

2.3 *Ancestors*

A particular case is highlighted by Martin Rundkvist in the Gotlandic cemetery of Barshalder. While in the Viking age burials the choice of orientation (always N-S) was not correlated with gender or the artefacts, it was connected with age. He noticed, indeed, that in a restrict number of children's graves, the choice of orientation does not respect the main rule of the N-S axis, however seems that the aim was the creation of a group of graves of the same family, in which the children's burials tried to fit in

¹⁸ Chiesa Isnardi, p. 50.

¹⁹ Chiesa Isnardi 1991, p. 49; Lindström 1997, p. 119.

²⁰ Sturluson, p. 59. While the Valhalla was the house of the warriors dead during a battle, Hel hosted the souls of people whom the death was caused by disease or old age. Cfr Chiesa Isnardi. pp. 71, 72.

²¹ Sturluson, p. 82; Chiesa Isnardi p. 71.

²² Zugaiar, 2012, p. 9.

²³ Chiesa Isnardi 1991, p. 57.

the space of the older ones (probably the grandfather and the grandmother). ²⁴ Perhaps is possible to give a similar explanation to the Grave in Facility 12 in Eke, where the skeletons I and II appear to have been deposited in correlation of skeleton III, following a small rotation from the main orientation axis to adapt the burials to the older one.

3. Conclusions

Different attempts were made to give some possible explanations to the choice of orientation for the graves, in particular way for the Viking Age graves: the election of the N-S axis can be connected to mythology beliefs, for example the location of the two Worlds of Dead, or reasons associated to the place that the same defuncts used to dwell in life, or reasons connected to the presence of other linked burials in the graveyard. The sensible rotation of the axis from the right cardinal points may be due to the choice to adapt the burial towards other previous graves or constructions, otherwise because another conception of cardinal points was preferred.

Maybe is also possible to apply the same interpretations to the Migration period graves, giving religious or social explanation to the preference to place the head in the Northern edge of the burial, but the studies in this regard are not sufficient to give a convincing justification, and any account about it would be too precarious to be persuasive. However, is important to notice that this main change accrued in the Viking age, while on Gotland the tendency to bury people with the head northwards was a constant choice also during the eras before Migration period.

²⁴ Rundkvist, pp. 83, 84.

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Animal Offerings and Ritual Activity

by Cherie Jeanette Larkin

Excavations in Eke parish, situated on the south-east coast of Gotland, conducted during the 2021 summer field course run by Arendus AB have uncovered two separate facilities with a mixture of human and animal remains. One of the facilities (L1977:4153) is clearly a grave while the other facility (L2021:1504) is an undefined structure containing cremation remains. Previous excavations in the nearby areas of Eke and Rone parish have also uncovered animal remains which may be linked to common beliefs and traditions on Gotland that show parallels to the practices in the wider Scandinavian region.

Inhumation Grave (L1977:4153) Guding's Castle

The investigation of a large stone packing (L1977:4153, construction 7) inside the ancient hillfort of Guding's Castle resulted in the discovery of a male inhumation grave tentatively dated to the Viking Age. The dating is based on the typology of the penannular brooch found within the grave. Samples from the skeletal remains have been sent for ^{14}C analysis to determine more precise dating. The facility is situated in the south of Guding's Castle, just to the east of a number of graves that were excavated in previous field courses. The grave (7:2) was situated centrally within the stone packing and oriented in a north-south direction, indicating a pagan burial. While excavating the soil around the cranium, to facilitate its removal, a few small bird bones were uncovered (Fig. 1 & 2). Later, after the removal of the remains from the grave, cleaning of the cranium fragments uncovered two more bird bones within the soil attached to the fragments. The cranium was heavily fractured and filled with soil which may account for some of the bird bones being found seemingly within the cranium. Unfortunately, the small amount and size of the bones made it difficult to identify the species of bird. The nearness to the cranium points to the deposit of the bird remains as being most likely intentional. However, it has been difficult to find exact parallels in other grave settings in the area around Guding's Castle. A single fish vertebra was found in the sifting of the soil from the grave, however, this cannot be confirmed as an intentional deposit.



Figure 1. Detail of cranium from skeleton in facility L1977:4153, construction 7:2. Photograph by author.



Figure 2. Bird bones found near the cranium of the skeleton in construction 7:2. Photograph by Dan Carlsson.

Cremation Grave (L2021:1504) Eke Parish

During the same field season, another facility was found to contain animal remains together with those of a human. Approximately 200 meters south-east of the Guding's Castle ramparts, facility L2021:1504, construction 1 contained cremation remains that were a mixture of human and small animal bones. The human remains consisted of two cranium fragments while the other identifiable bones were from one or more small animals, possibly including a dog (Petter Åkeson, personal communication, 02 September 2021). Unfortunately, many of the bones were too small to be identified. A sample of the remains have been sent for ^{14}C analysis.

The cremation remains were found in the center of a small circular stone setting that was itself located inside a larger ring of stones that vaguely resemble the outline of a ship (Fig. 3). The stones appear heavily disturbed, this might be partially attributed to the tree roots growing throughout the facility. The cremation remains themselves might also have been affected by the root system since they were located under one of the roots.

Go. Eke parish. 2021. L2021:1504, layer III



Figure 3. Vertical plan of facility L2021:1504. The vague ship-like stone outline is highlighted in purple. Construction 1, highlighted in yellow, contained the cremation remains. F32 marks the location where the lance was found.

Although not a clear ship setting, the overall structure might correlate to a ship setting with less tightly packed stones (Wehlin 2013: 59). Cremations located within ship settings occur in various ways including being contained within an urn or other sealed container, within a stone coffin or a combination of both. They are also found as only the

burned remains themselves without any form of container (Wehlin 2013: 61). There was no evidence of an urn or stone coffin in facility L2021:1504 which would have held the remains.

Ship settings on Gotland ceased around 700 BC so it will be necessary to obtain ^{14}C dating on the cremation remains in order to consider the possibility that this could be a ship setting (Martinsson-Wallin & Wehlin 2017: 242).

In the same facility (roughly 1 meter to the north), within the ship-like framing of stones, the tip of a lance was found stuck between some small rocks. The shaft was broken off and the lance was oriented with the tip pointing vertically upwards (*Fig. 4*). Weapons such as spears, swords and axes have been found plunged into Viking Age cremation remains or into the ground next to them in regions including Södermanland, Uppland, Öland, and Åland (Nordberg 2002: 15–19). This leads to the question of whether the lance was originally connected to the cremation and was later displaced. However, if this were the case, the dating of the facility would be much later than would be possible for a ship setting.



*Figure 4. Lance tip (F32) partially excavated.
Photograph by Dan Carlsson.*

Previous Excavations

Eke Parish

Graves

Unlike the grave (L1977:4153, construction 7:2) excavated during this year's field course, the graves excavated within the ramparts of Guding's Castle during the 2018 field course did not contain any animal bones (Carlsson & Bokor 2018: 59–60). However, the 2019 excavation included the grave of a young adult male from the Migration Period (Eke 101:1), approximately 600 meters west from Guding's Castle, which contained two unburned fragments of cow bone (Bokor & Carlsson 2019: 16; Bengtsson & Carlsson 2020: 87). In addition, the 2020 excavation had one probable grave (Eke 95:1, construction 2), approximately 800 meters west from Guding's Castle, which may have contained two different cremation graves. The remains included three human phalanges from a young adult in addition to several animal bones including bird, horse, cow, sheep or goat, pig, and fish. The facility is broadly dated from the Migration Period to the Early Middle Ages based on objects found in the grave (Bengtsson & Carlsson 2020: 41–42, 89–90, 94).

Structures

Other excavated facilities in the region around Eke have also uncovered various types of animal offerings. In 2019, Arendus excavated a facility (Eke 99:1), which lies on a small ridge 800 meters from Guding's Castle, as part of the summer field school. The facility includes four postholes (2.2 m apart) that form a quadrant (*fig. 5*) and has been referred to in the previous years' reports as 'The Tower' (Bokor & Carlsson 2019: 21; Bengtsson & Carlsson 2020: 99). One of the postholes contained a whetstone while another contained bones of



figure 5. Facility 99:1 with newly made wooden posts set into the postholes (Bokor & Carlsson 2019).

various species of small animals (Bokor & Carlsson 2019: 21–23). The animal bones included those from a hare, a large bird, a small bird, a sheep, and a frog (Bokor & Carlsson 2019: 23; Bengtsson & Carlsson 2020: 87). At the time of the excavation the deposit of animal remains appeared to be a deliberate act (Bokor & Carlsson 2019: 22). However, according to the excavation report, the frog remains may have been a natural occurrence and not part of the initial deposit (Bengtsson & Carlsson 2020: 94). Remnants of two wooden posts (7:3 & 7:4) were dated to 861–985 AD and 764–886 AD respectively, which would place them clearly within the Viking Age (Bokor & Carlsson 2019: 21).

The animal bones and whetstone found in the postholes could be viewed as building offerings. Building offerings are artefacts that are deposited in a structure at the time of its construction, when alterations are made to the structure, or when the structure is abandoned or demolished. Deposits in postholes are a type of building offering and can include various objects such as whetstones, tools, ceramics and gold foil figures as well as animal bones (Falk 2002: 66–67; Jónsson 2014: 25, 54–55). While the inclusion of typical building deposit items in the postholes might point to this having been a structure, the question arises of what kind of structure could it have been. The thickness of the posts (35 cm) and the use of granite stones to encase the posts would point to a need to support a heavy structure, however, the small area (4.84 m²) would not be practical for an enclosed structure (Bokor & Carlsson 2019: 21). There is the possibility that rather than an enclosed structure, the posts may have supported an elevated platform.

Rone Parish

Uggarderojr

The Uggarde cairn (*Uggarderojr*) is located along the eastern coast of Gotland, north of Guding's Castle. An excavation conducted in 2009 in the Uggarde 3:1 area, led by Helene Martinsson-Wallin, focused on the area just to the west and south-west of the Bronze Age *Uggarderojr* (Rone 10:1). The excavation included a stone setting (Rone 10:3), a heap of fire-cracked stones (Rone 10:4), a stone posthole (Rone 10:5), and three test pits that were located on the outer edge of the cairn. Animal remains were found in four of these facilities (Martinsson-Wallin & Wehlin 2010; Martinsson-Wallin & Wehlin 2017: 236).

The stone setting (10:3) was found to contain a central burial that included charcoal and burnt bones as well as both burnt and unburnt bones of various species scattered throughout the construction. It is important to note that many of the bones were not identifiable. Of those that could be identified, five were cremated human bones (F2) while the rest were unburnt animal bones including goat's teeth (F143), a pig's tooth (F56), and a single bird bone (F200) for which the species was not identifiable. In addition, an unburnt sheep's tooth (F142) was submitted for ¹⁴C analysis with the calibrated date of 510–200 BC (Early Iron Age). A charcoal sample from the bottom of the construction was dated to 1450–1190 BC (Bronze Age) (Martinsson-Wallin & Wehlin 2010: 8–11, 30–31).

Animal bones of various species were also found in the heap of fire-cracked stones (10:4) located south/south-east of the stone setting (10:3). Although the condition of the stones in the construction pointed to repeated burnings, the bones were found on the outskirts of the construction and were unburnt (Martinsson-Wallin & Wehlin 2010: 11, 29). The animal bones included those from hare (F6), dog (F7), pig (F7), and cow (F7). A single unburnt human wrist bone was also found (F7) (Martinsson-Wallin & Wehlin 2010: 29, 32). The construction was dated to 1440–1130 BC (Early Bronze Age) based on charcoal samples (Martinsson-Wallin & Wehlin 2010: 11, 27).

Two of the test pits dug on the outer stone edge chain of the cairn contained cow bones. Test pit 1 appeared to be a possible posthole showing evidence of contact with fire in the discolored soil (Layers 4–5). However, within Layer 4, three unburnt bones from a cow's foot (F22) dating to 570–780 AD (Late Iron Age/Vendel Period) were found. The construction also contained some flint and stone fragments. Test pit 2 was also interpreted as a posthole with the only find being a cow's tooth dating to 430–650 AD (Late Iron Age/Migration-Vendel Period) (Martinsson-Wallin & Wehlin 2010: 14–16).

Animal Remains

Death rituals retained a level of continuity from 200 AD throughout the first millennium until the Christianization of Scandinavia. It was common during this time for domestic animals and birds of prey to be included in graves (Jennbert 2006: 135–136). The species of animal and the manner of deposition can vary depending on the type of grave, the status of the individual, the time-period and the specific region. The slaughter of animals for a death

ritual could be seen as an expression of a person's wealth as they could afford to sacrifice these animals (Jennbert 2006: p.138). The inclusion of various types of animals in graves may also have been connected to the attendant spirits, known as *fylgur*, that were associated with an individual (Jennbert 2006: 135–137). In addition to graves, animal remains are found as building offerings and in connection with ritual activity.

There are many examples of bird remains in Scandinavian graves during the Viking Age and the preceding millennium. Although bird remains are not uncommon burial deposits in Scandinavia, the type of bird and the context of the deposit can differ. The presence of bird bones encompasses both male and female as well as cremation and inhumation graves. The species of bird found can include chicken, goose, duck, and birds of prey such as falcon or hawk. Unfortunately, the fragility of bird bones means that some may not survive the natural decomposition that occurs in inhumation graves nor the cremation process resulting in them being underrepresented in excavation reports (Karpinska 2018: 120, 124).

The various species of birds used may also be connected to their possible meaning and usage. Domestic birds, such as chickens, ducks, and geese, may have been placed in the grave as sacrifices or 'meat additions' (*Fleischbeigaben*) (Karpinska 2018: 125). An exception to this is the presence of complete chickens exclusively in female graves (Strehlau 2018: 51). Birds of prey, such as the falcon, may have been considered status symbols which were used as grave goods and occur exclusively in high status male graves (Karpinska 2018: 126, 128; Strehlau 2018: 51).

Dogs are commonly found in prehistoric Scandinavian graves, with increasing frequency between c. 500–1100 AD. Similar to birds, dogs are found in various types of graves including cremation, chamber, and boat graves of both males and females of all ages and social status (Gräslund 2004: 167–168; Strehlau 2018: 30–33). Animal remains from the Vendel Period and Viking Age graves in Uppland, Sweden show that dogs are the most common animal found in burials (Strehlau 2018: 30–33). On Gotland, dog remains have been found in Viking Age graves of both males and females in Hellvi (Gräslund 2004: 169). Dogs are also most often, but not always, deposited whole implying that they served a different purpose in the burial ritual than other domestic animals such as pigs, sheep, goats, cattle, and chickens (Strehlau 2018: 36, 40).

While the presence of dogs in graves is a seemingly common occurrence, the meaning behind their inclusion is not completely clear. Kristina Jennbert (2006: 136) posits that the inclusion of specific animals in graves can be viewed as references to activities for which the dead person was associated. In the case of dogs, as well as birds of prey, this could be considered a reference to hunting. The long history of using dogs as companions and the subsequent connection that has formed between humans and dogs may also account for their inclusion in graves (Jennbert 2003: 148). Whereas, Anne-Sofie Gräslund (2004: 172–173) states that although the dogs buried with humans may have been their companion or hunting dogs during life they may also have served another purpose as a "medium between the living and the dead". She points to both Balder's Dreams and the Voluspa which include references to dogs that are seemingly guardians to Hel (Gräslund 2004: 172).

Similar to dogs, horses are one of the most common animals found in graves. They occur in both inhumation and cremation graves, of males and females of different ages and social status, however they are most frequent in inhumation graves of high-status young adult males (Strehlau 2018: 30–34). Cattle, pig, and sheep or goat are also very common

animal depositions and have similar distributions across all grave types (Strehlau 2018: 31–34). Unlike dogs, horses, and birds of prey, these domestic animals (cattle, pig, sheep/goat) most often occur as incomplete depositions (Strehlau 2018: 36). When a deposit only contains partial remains from an animal, they are usually the non-fleshy parts, such as the cranium, hands, feet, or tail (Strehlau 2018: 54). This may be due to the fleshy parts of the animal having been used in feasting (Strehlau 2018: 40).

Discussion

Graves

The bird bones found near the cranium of the individual in the Viking Age grave (L1977:4153 construction 7:2), although too incomplete to positively identify, were determined to be from a small bird which would make it unlikely to have been a bird of prey. It is more probable that the bird was placed in the grave as a sacrifice or meat addition, whether whole or partial is unknown. Fish do occur in burials, however the inclusion of only one vertebra in an area close to the seacoast does not make it clear that this was a deliberate deposit (Strehlau 2018: 30).

Facility (L2021:1504, construction 1) contained phalanges of a young human and various small animal bones, none of which could be identified by species. The bones of a small mammal could have been those of a dog. The inclusion of a dog and other small animals along with those of a human in a cremation would be typical during the Bronze or Iron Age in Scandinavia, but without ¹⁴C dating a more precise time-period cannot be determined.

The inhumation grave of an adult male (101:1) from the Migration Period contained two cranium fragments of a cow (Bengtsson & Carlsson 2020: 86–87). The inclusion of only fragments of a cow's cranium could be considered the partial remains of a cow that was slaughtered as part of the ritual activity associated with the burial (Strehlau 2018: 40, 54).

The remains from the probable grave (95:1, construction 2) contained a large amount of mostly unburned bird bones which ranged in size and could have possibly included cormorant and teal (Bengtsson & Carlsson 2020: 95). The inclusion of horse bones in the cremation grave of a young adult would be common for a Vendel Period or Viking Age grave. However, this is the only facility mentioned in this report with horse remains. The concentration of the human and animal remains in the center of the facility and the presence of ceramic fragments which may have been from a container that once held the remains, makes it likely that the animal remains were sacrifices made in connection to the cremation. Dating of the facility from the Migration Period to the Early Middle Ages is broad and goes beyond the pre-Christian era when cremations were common (Bengtsson & Carlsson 2020: 41–42, 94).

'The Tower'

The bird remains found in the posthole of the so-called 'tower' (Eke 99:1) dated to the Viking Age, are likely some type of offering but it is not clear if they were in connection to the erection of a structure or some other ritual activity associated with the erected posts. An interesting alternative interpretation of the posts in Eke could be that they were not part of a larger structure but may have themselves constituted a ritual or cult site. In his account of

the Rūs he encountered on the Volga, Ibn Fadlan writes that they erected large blocks of wood with faces on them at which they would leave offerings of food and alcohol and beg and prostrate themselves in hopes of improving their trade. If the traders were successful, they would slaughter a cow or sheep and place the meat at the posts and mount the animal's head on top of the post (Fadlan 2017: The Rūsiyyah, para. 77). Offerings set in the postholes are not mentioned in Fadlan's account, but the concept of erecting what he describes as 'large blocks of wood' near a body of water at which offerings are placed does show parallels to the facility in Eke.

If the posts did support a kind of structure, it seems more likely that it would have been an open structure, such as a platform, as mentioned previously. In this case, a possible parallel to the facility in Eke might be found in the four postholes from the Vendel Period cult site of Lilla Ullevi in the Mälardalen region of Uppland (Bäck *et al.* 2008: 4, 21). Lilla Ullevi is known as a *vi*-place, a holy or sacred place, that can include various types of buildings and structures (Bäck *et al.* 2008: 25, 28). One of these structures, known as a *harg*, occurs at Lilla Ullevi and may include the remains of a type of ritual platform known as a *sejdhjäll* that has been described in the sagas (Bäck *et al.* 2008: 28, 37). The *harg* itself is an open-air site consisting of only a stone packing from which extends two rows of stones wherein lies the remains of four postholes (Bäck *et al.* 2008: 35–36). The postholes are described as 'sturdy' (*kraftiga*) and range in size from 0.70 – 0.90 meters in diameter. There is a distance of 2.3 m between the postholes on the east and west sides and 6.2 m between those on the north and south sides, covering an area of approximately 14 m². The exact form of the *sejdhjäll* is unknown but it has been described as having four legs, being high or tall and 'difficult to get up to' and ranging in size so as to fit from two people to twelve people (Bäck *et al.* 2008: 37–40). Although a direct connection cannot be made between the structure at Lilla Ullevi and the facility in Eke, there are enough similarities to show common ritualistic elements existed both on mainland Scandinavia and Gotland. Unfortunately, an in depth look at these elements goes beyond the scope of this report.

Another interesting note about the facility is the existence of a single erected stone on the south-west side of the four posts (See *fig. 5*). The stone was found partially tipped over (the level of which can be observed in the dark soil line on the stone) during the excavation and was then re-erected. South stones and south structures are found to the south and south-west of cairns from the Bronze Age (Martinsson-Wallin & Wehlin 2017: 231–232). Even though the cairns are dated to the Bronze Age, some of the dates from the south structures and nearby kerbstones show activity into the Iron Age. *Uggarderojr*, north of Guding's Castle in Rone parish, includes deposits of cow bones dated to the Late Iron Age (c. 430–650 AD and c. 580–770 AD) and *Digerrojr*, 40 km north, has charcoal dates from the Early and Late Iron Age (c. 70 – 225 AD, c. 260 – 420 AD, and c. 720 – 940 AD) (Martinsson-Wallin & Wehlin 2017: 236–238).

It is clear that facility 99:1 is not a grave, nor was it built during the Bronze Age, so the existence of this erected stone brings up questions about its use and meaning and whether or not it was placed in its location previous to the construction of the posts. Looking at a photograph of the south structure from *Digerrojr* (*fig. 6*), it is easy to see similarities with facility 99:1. The similarities could be a coincidence, but it is important to consider whether



figure 6. A 'south structure' located next to Digerrojr in eastern Gotland. Photograph by Joakim Wehlin. (Martinsson-Wallin & Wehlin 2017: 237).

facility 99:1 could have been an earlier ritual site that has been reused and possibly repurposed over time.

Uggarderojr

The stone setting (10:3) from *Uggarderojr* consisted of multiple layers of activity, the oldest of which has been interpreted as a grave which included a concentration of burned bones (Martinsson-Wallin & Wehlin 2010: 18). The facility included burned human bones, one unburned bird bone in addition to unburned goat and pig bones (Martinsson-Wallin & Wehlin 2010: 8–11, 18, 30–31). The mixture of human and animal bones points to ritual activity in connection with the cremation burial. However, the facility shows activity ranging from the Early Bronze Age to the Early Iron Age.

The heap of fire-cracked stones (10:4) dated to the Early Bronze Age, is more difficult to interpret. The evidence of repeated burnings of the stones in combination with animal bones from different species points to ritual activity. However, the types of bones found (hare, dog, pig, cow) seem to be a mixture of sacrificial animals (hare, pig, cow) and a depositional animal (dog), in addition to a human wrist bone, all of which were unburned. If all of these bones had shown some evidence of contact with fire, they would constitute a typical cremation assemblage.

The postholes found in the test pits dug around the edge of *Uggarderojr* (Rone 10:1) contained fragments of cow feet and a cow tooth dated to the Late Iron Age (Migration and Vendel Periods). Similar to the grave in Eke (101:1), the presence of the non-fleshy parts of a

cow point to them being remains of a slaughtered animal which served as a kind of symbolic deposit in the postholes (Strehlau 2018: 55, 59). Parallels can also be seen with the postholes in Eke (99:1) which contained animal remains.

The presence of postholes, seemingly unrelated to a construction, containing deposits of animal bones, again raises the question of the use of these posts. The inclusion of only the cow's feet and a tooth, both coming from non-fleshy body parts, points to these being the remains of a possible ritualistic slaughter. Neil Price (2008: 260–261) mentions the presence of small pits dug along the edges of burial mounds where extended burial rituals may have occurred. Could the posts along the edge of the cairn have served a similar purpose as sites of ritual activity? The dating of the constructions connected to *Uggarderojr* point to ritual activity over an extended period of time from the Early Bronze Age to the Late Iron Age. The charcoal dates seem to be from the earlier Bronze Age activity whereas the dating of the animal bones tend to be from the Iron Age. The range of dates means that this site was, as stated by Martinsson-Wallin and Wehlin (2010: 21; 2017: 237), reused over two millennium for various burial and ritual activities.

Summary

The animal remains found at various sites along the eastern coast of Gotland show a continuity of traditions and reuse of ritual sites. Animals have been used as offerings in burial and ritual activities throughout the Bronze and Iron Age. Although some variations occur, the recurrence of animals used and the reuse of sites over millennium show that the local inhabitants have retained certain belief systems and traditions that must have served a purpose to the community.

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Bilaga x

Grinding Grooves in the Parishes of Grötlingbo, Eke and Rone

Anna Sointula

Introduction

The Connecting Point is a project which started in 2018 and has studied the continuity of human activities in the coastal areas southeast of Gotland. During the summer of 2021, the excavations carried out in the parishes (*socken*) of Grötlingbo, Eke and Rone, which includes landscapes with many registered ancient monuments and remains such as graves, hillforts, and other constructions, dated from the Early Bronze Age to the Early Middle Ages. In the parish of Eke, the areas within and further towards the coast in the southeast of the Gudings hillfort (L1977:4059) were excavated further. A site (L2021:1494), which initially had been interpreted and registered as a grave field in the Swedish National Heritage Board's (RAÄ) database for archaeological sites and monuments revealed after the investigations in 2021 to be a more complex area with a variety of different, sometimes diffuse constructions, one of them possibly a slipway for boats (see L2021:1494, Anl. 8). As already noted in the reports from the previous years of the project, one group of ancient monuments detected within the close perimetries of the investigated sites, is the stones with grinding grooves (*sliprännor*, *slipskåror*). Some of these stones are located especially between the heights of 2 and 3 metres above the sea level (MSL), and thus a likely dating for these grinding grooves was suggested to be between the years of 800 and 1200 AD. (Bengtsson & Carlsson, 2020: 28).

It seems evident, that the connection between the grinding grooves and water-related activities near the coastal lines of southeast Gotland exists. The purpose of this paper was to further investigate this method to chronologise grinding grooves based on estimating ancient coastal lines with MSL data and to analyse the connection between the grinding grooves and the excavated sites in Grötlingbo, Eke and Rone. This was carried out with the help of the databases of the Swedish National Heritage Board and the Swedish mapping, cadastral and land registration authority (Lantmäteriet) which were spatially analysed in a Geographic Information Systems (GIS) Software.

Previous Research on the Grinding Grooves

Stones with grinding grooves have been found all around Europe, as well as some other continents such as Africa and Australia. A high number of them have also been found on the Swedish island of Gotland, where according to some estimates there would be approximately 900 stones with 3600 grinding grooves (*Figure 1.*) (Gannholm, 2017: 4). These stones and grooves can often vary in their shape, form and even material, but most commonly on Gotland these grooves were made on limestone.

The creation and function of the grinding grooves on Gotland have baffled researchers for decades and several different theories about them have been presented (e.g., an astronomical calendar). These stones with grooves can even be called with different names based on the theories that the author believes in: in Gotland these stones are commonly called as *svärdsliplingsstenar* (eng. *sword sharpening stones*), due to a local tradition according to which their ancestors used these stones as whetstones for their swords or dragons have used them to clean their things (Säve, 1880). In Gotlandic history writing, these grooves have often been explained by some sort of ritual practice and some have even suggested them to have had a cult status, especially after Arthur Nordén first suggested this view in his article "*Sliprännornas och skålgroparnas problem*" (1942).

Determining any precise dating for the creation of these grinding grooves has proven out to be challenging due to the lack of any archaeological context found in their immediate surroundings and there have been several different perspectives of the matter throughout the years. During the first part of the 20th century scholars were generally in agreement with the grinding grooves being made during the Late Stone Age, which was first suggested by Nils Lithberg in his doctoral dissertation *“Gotlands stenålder”* (1914). This view has been supported even during the past decade for example referring to some picture stones which have typologically dated to the years between 600 and 800 AD. According to Gannholm (2017), parts of the grooves appeared as to have been cut with the outlines of the picture stones, the grooves must have already existed in the stones a priori, like in the picture stone from Othem (Henriksson, 1988).

Another perspective was offered in 1933 when a German geologist, Henrik Munthe, published his work *“Om Gotlands s.k. svärdsliplingsstenar”*. In his study, Munthe had analysed the coastline chronology of Gotland and concluded, that the locations of the grooves closest to the coast would have been covered by the seawater until 600 AD. (Munthe, 1933). Torsten Mårtensson, on the other hand stated in 1936, how it is entirely as possible that the grinding grooves were made during the prehistoric, as during any other later time (Mårtensson, 1936: 131). In 1985 an in-depth study of the grinding grooves on Gotland was also conducted by Maya Schmidt, who believed them to be linked with black smithing during the Iron Age (Schmidt, 1985). During the past decades there have been some other attempts to date these grooves (e.g., Grannholm, 2017), but any common consensus on the matter has yet to be achieved.

The grinding grooves in Europe have also been dated differently based on their location. In France, these stones with grinding grooves are generally dated to the Neolithic period (Audoux et al, 1992). The grooves found from France have previously been compared with the Gotlandic ones because of their slightly similar appearance (Gannholm, 2020). The French grooves, however, tends to have a more V-shaped form compared to the U-shape of the Gotlandic grooves (Gannholm, 1992: 7). There is also another group of stones with grinding grooves, which has rarely been compared with the Gotlandic ones regardless of many similarities in their shape, form as well as their location. Seven of these stones that are known today are located in the areas of modern Finland, more specifically in the province of Tavastia (Aalto, 2020: 7). The Finnish grinding grooves have not gained as much academic attention as the ones in Sweden, even though, that they have been known amongst researchers nearly as long (Aalto, 2020: 11). Studies regarding their dating, however, have been conducted by studying the coastline chronologies and the dating of other nearby ancient monuments and sites (see e.g., Cleve, 1934 & Äyräpää, 1953). Based on these studies the grinding grooves in Finland have generally been regarded to be made during the Late Iron Age, more specifically between 800 - 1100 AD. (Aalto, 2020: 12).

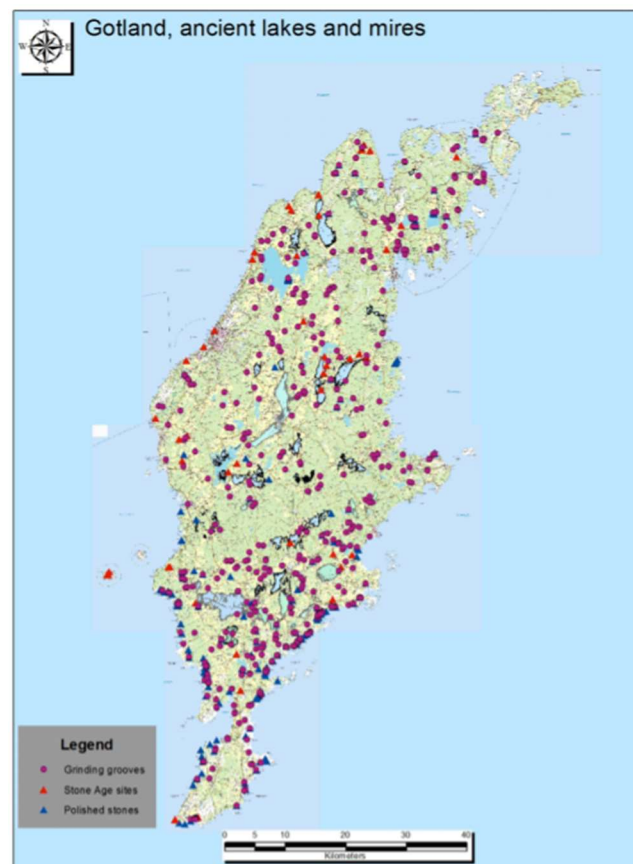


Figure 1. The stones with grinding grooves on Gotland according to Gannholm (Gannholm, 2020: 46).

Connecting with water

As Gotland is located in the middle of the Baltic Sea (90 kilometres to the Swedish mainland and 130 kilometres to the Baltic lands), maritime connections and activities have had, throughout the ages, a significant role in the lives of the people who have settled here. The Gotlandic Chronicles, *Guta Saga*, written during the 13th century is the earliest document to mention trade taking place on the island, however, many researchers argue that Gotland was a prominent part of international trading routes even centuries prior (Edquist, 2015: 77). Traces of human settlements during the Early Iron Age are not frequently met in locations close to the Gotlandic coasts, which however changes during the Late Iron Age and Early Middle Ages when several stone fences, graves and farms started to appear along the coast (Bokor & Carlsson, 2020: 7).

According to an old folk song, the fishing hamlet of Kronvalls, located in the parish of Ekste, was the place where the Danish king Valdemar IV Atterdag landed with his army in 1361, as they came to invade Visby (d'Agnan, 2010: 236). It is not, however, possible to say with absolute certainty whether this or any other fishing hamlet really existed during that period of time. The remains of prehistoric or medieval harbours and hamlets on Gotland are not frequently met and the remaining traces of evidence are in danger of being destroyed due to modern exploitation of the coastal areas on Gotland (d'Agnan, 2010: 236). Some estimates of their location, amount, and even chronological dating of some of the harbours and fishing hamlets have been made by researchers (see e.g., Säve, 1880). A map of the locations of medieval harbours on Gotland can be retrieved from the webpage of the County Administration on Gotland (e.g., Figure 2.). From the figures below (Figures 3.-5.) it is possible to see how the locations of these places which have been interpreted as medieval harbours align with some of the remaining fishing hamlets in the parishes of Grötlingbo, Eke and Rone. From this it is possible to deduce that certain maritime activities continued to be carried out in these locations.

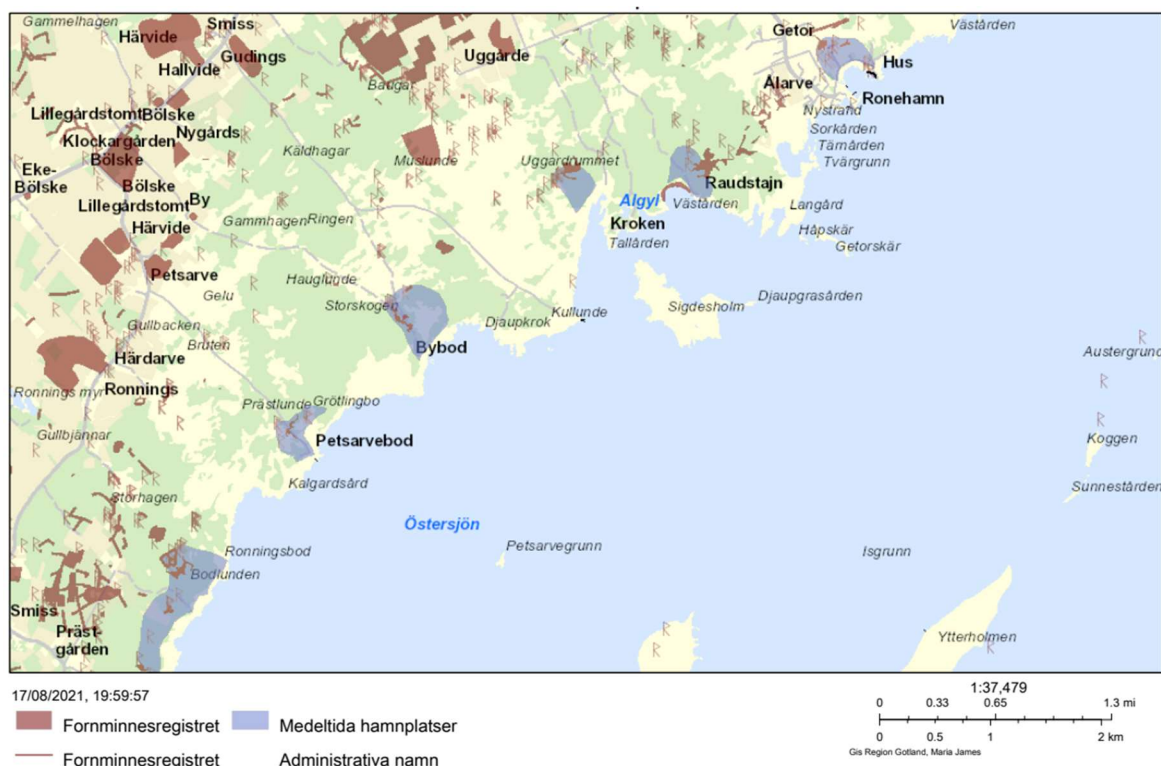


Figure 2. Estimated locations of the medieval harbours in the parishes of Grötlingbo, Eke and Rone (© Lantmäteriet, Region Gotland).



Figure 3. The fishing hamlets of Petsarvebod and Ronningsbod marked with red circles (©Lantmäteriet, edited by the author).

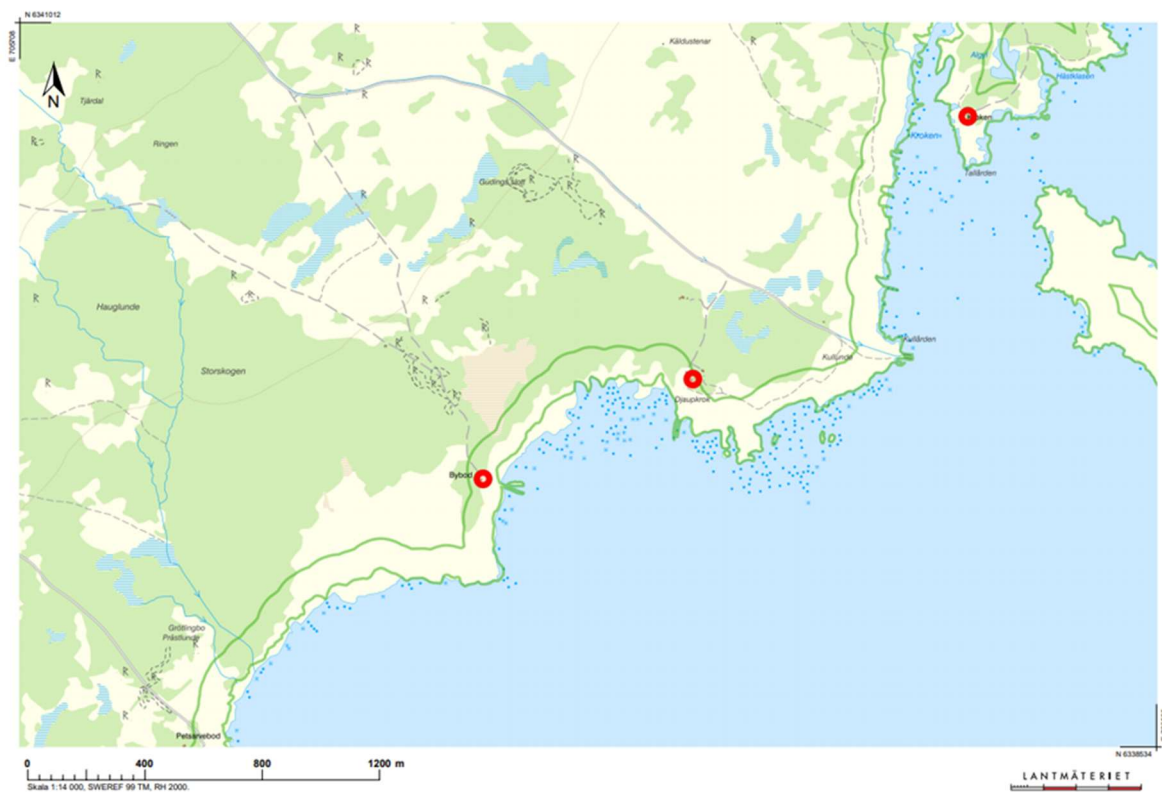


Figure 4. The fishing hamlets of Bybod, Djaupkrok and Kroken marked with red circles (©Lantmäteriet, edited by the author).

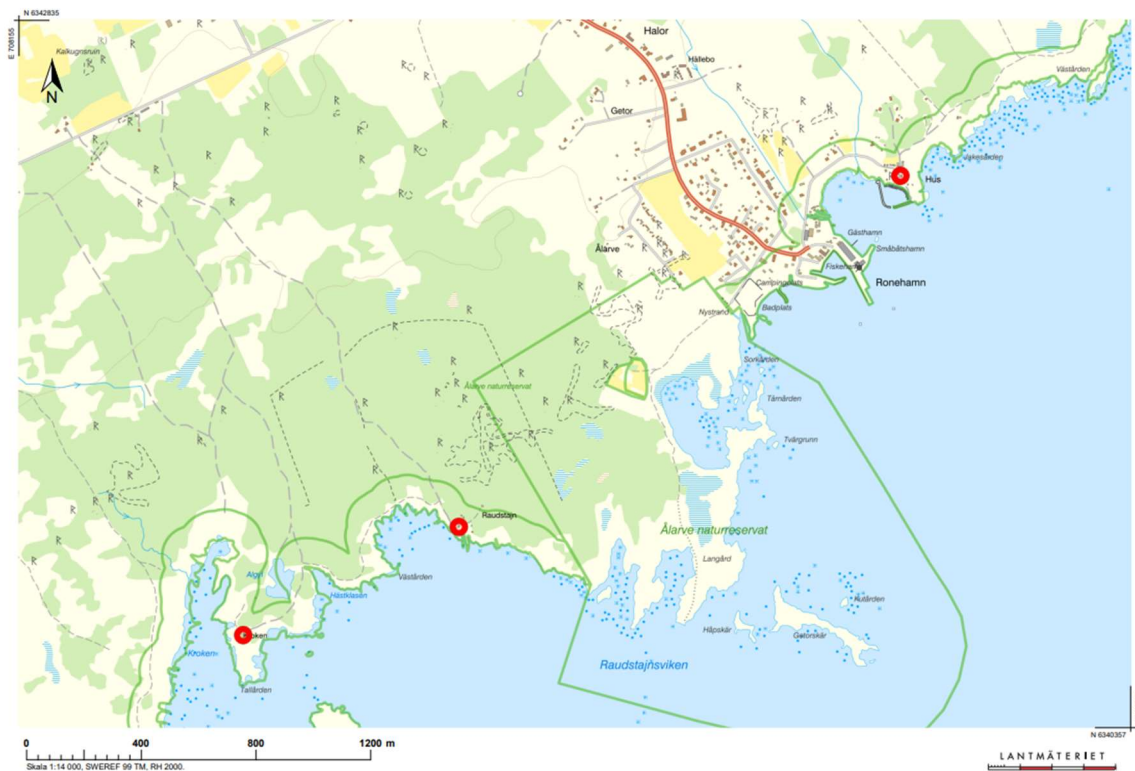
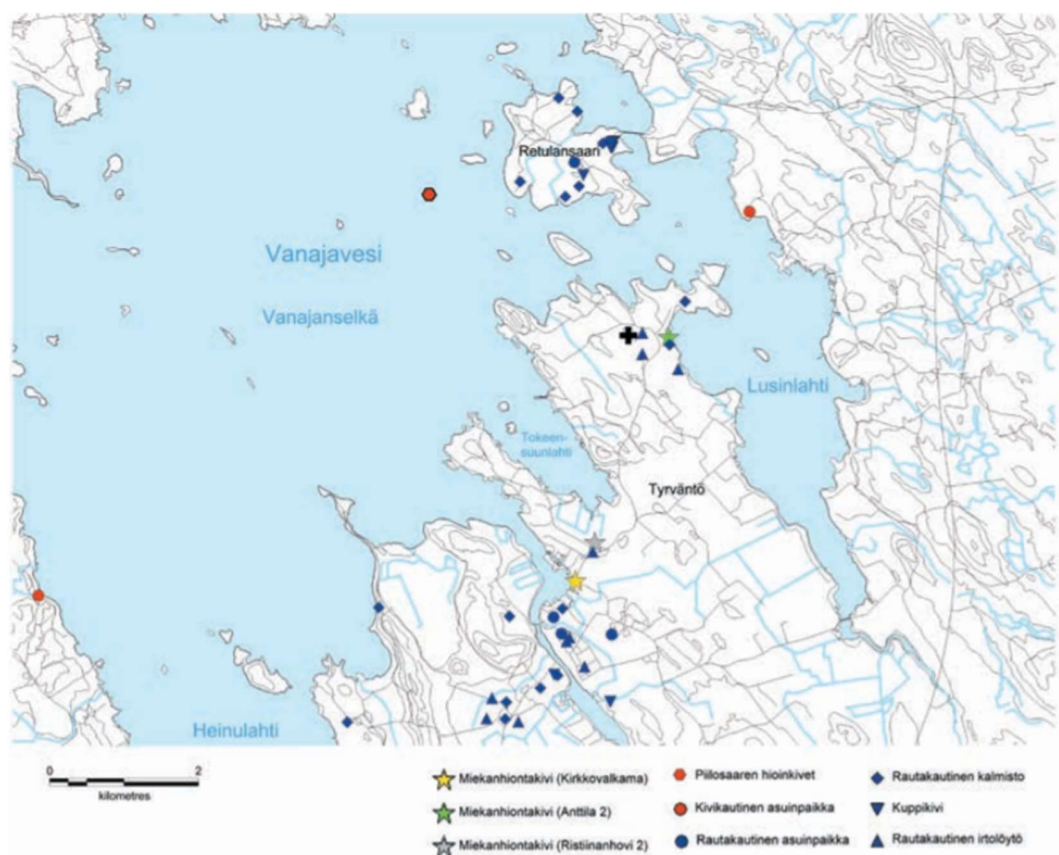


Figure 5. The fishing hamlets of Kroken, Raudstajn and Ronehamn marked with red circles (©Lantmäteriet, edited by the author).

Figure 6. Three of the stones with grinding grooves in Finland. The grinding grooves are marked with the stars, sites dated to Iron Age are marked with a blue dot, diamond and a triangle pointing upwards (Aalto, 2020: 14).



As already presented (*Figure 1.*), the locations of the stones with grinding grooves on Gotland are also most often met in close perimetries from the coast or other areas which have been lakes or ponds before the draining of the wetlands during the 1950's. This seems to be the case with the grinding grooves found in Finland as well (*Figure 6.*) (Aalto, 2020: 12). Therefore, it would be possible to argue that the function of the grinding grooves were closely connected with water related activities. Therefore, studying the past sea levels and coastline chronology with the most reoccurring locations of the stones with the grinding grooves might give some indicators of the time during which they were made.

Analysing The Spatial Data

As already mentioned, this study was conducted with the help of different databases from the Swedish National Heritage Board and the Swedish mapping, cadastral and land registration authority and analysed in a GIS Mapping Software. The percentages of the sites with grinding grooves within 4 metres above the modern sea level were compared with the total amount of sites with grinding grooves in the parishes of Grötlingbo, Eke and Rone. During the course of the study, some challenges regarding data collection and management were met, which are critically taken into account and further explained here. Some challenges regarding the estimation of ancient coastal lines and its changes are also considered.

To be able to locate all of the stones with grinding grooves within the parishes of Grötlingbo, Eke and Rone on the map, it was necessary to gather and analyse the information from the map service (Fornsök) on the Swedish National Heritage Board's web page. Using this service, it was possible to search data based on several different attributes or criteria, for example, the location, category of the monument or site, or their official number in the register. The information in this database consists of data gathered during the past 80 years (raä.se, n.d.). Due to this, some of the monuments and sites in Fornsök may be registered with several different coordinates, and the categorisations are not always consistent.

These challenges were also met while searching for the stones with the grinding grooves from the parishes of Grötlingbo, Eke and Rone. The stones with the grinding grooves are registered with several different names and categorised under different types of monuments. Several different methods of searching for the grinding grooves were tested during the process of this study, and only one search word (*sliprännor*) which was able to produce the most coherent results was used later in the statistical calculations (*Figure 7.*). The total number of sites detected with the search word "sliprännor" were 1305, while the second largest number of sites (1050) was achieved with the search word "svärdsliplingssten". With a closer examination of the search results, it was discovered, that most of the hits with the search word "svärdsliplingssten" were also found with the search word "sliprännor", as were the hits with the search word "sipskåror". There were also some sites which were left undetected regardless but discovered to be sites with grinding grooves after a closer examination of the documents provided by Fornsök. Many of the sites matched with the search also consisted very different number of stones and grinding grooves, and it seemed that these larger groupings were most common in the areas closer to the shore.

With the help of MSL data, the number of detected sites within at least four metres above the current sea level were also calculated. The actual number of the sites with grinding grooves in these parishes is therefore most likely not accurate nor reflects the number of stones or the grinding grooves in them, and only the percentages should be considered as an indicative result of this statistical study.

	Number of sites	within 4 metres above the sea level	
Grötlingbo	40	17	42,5 %
Eke	23	2	8,7 %
Rone	53	14	26,4 %
Total	116	35	~30 %

Figure 7. Number of the sites with grinding grooves in the parishes of Grötlingbo, Eke and Rone.

As the sea level around Gotland is receding, this study has used a certain estimate regarding the past tectonic uplift (*land uplift*) on the island. The application of modern GPS techniques has been able to improve the reliability of these kind of studies during the past decade (Nerheim, 2008: 5), even though there are always more challenges the further back in time it is necessary to go. It should be noted, for example, that this method is mostly applicable in the calculation of the *absolute* land uplift, which means the post-glacial rebound caused by the pressure of the ice sheets being released due to their melting (Nerheim, 2008: 5). This also means, that the level of the sea, is technically consistent and the land uplift is being seen as proportional to it. The changes and movements of the sea level, however, are rarely stable. Therefore, to be able to estimate the *apparent* land uplift, more studies regarding the paleolimnology of the specific region or area in question would be recommendable.

According to a report by SMHI (The Swedish Meteorological and Hydrological Institute), published in 2008, the amount of land uplift on southern Gotland is approximately 0,2 centimetres per year (Nerheim, 2008: 5). Based on this, it is possible to calculate a careful estimate of 2 metres land uplift since the year 1000 AD. In the following figures (*Figures 8.-10.*) it is possible to see three locations in the coastal areas of the parishes of Grötlingbo, Eke and Rone, where the levels above the sea are demonstrated with red height curves while the yellow areas depict the sites with grinding grooves. The light purple areas depict other ancient monuments and sites. According to the hypothesis of this study, it is possible to create a *terminust post quem* to the stones with grinding grooves in the parishes of Grötlingbo, Eke and Rone, which based on the results of this study is 1000 years, as there were no sites with grinding grooves detected below the height of 2 metres above the sea level.

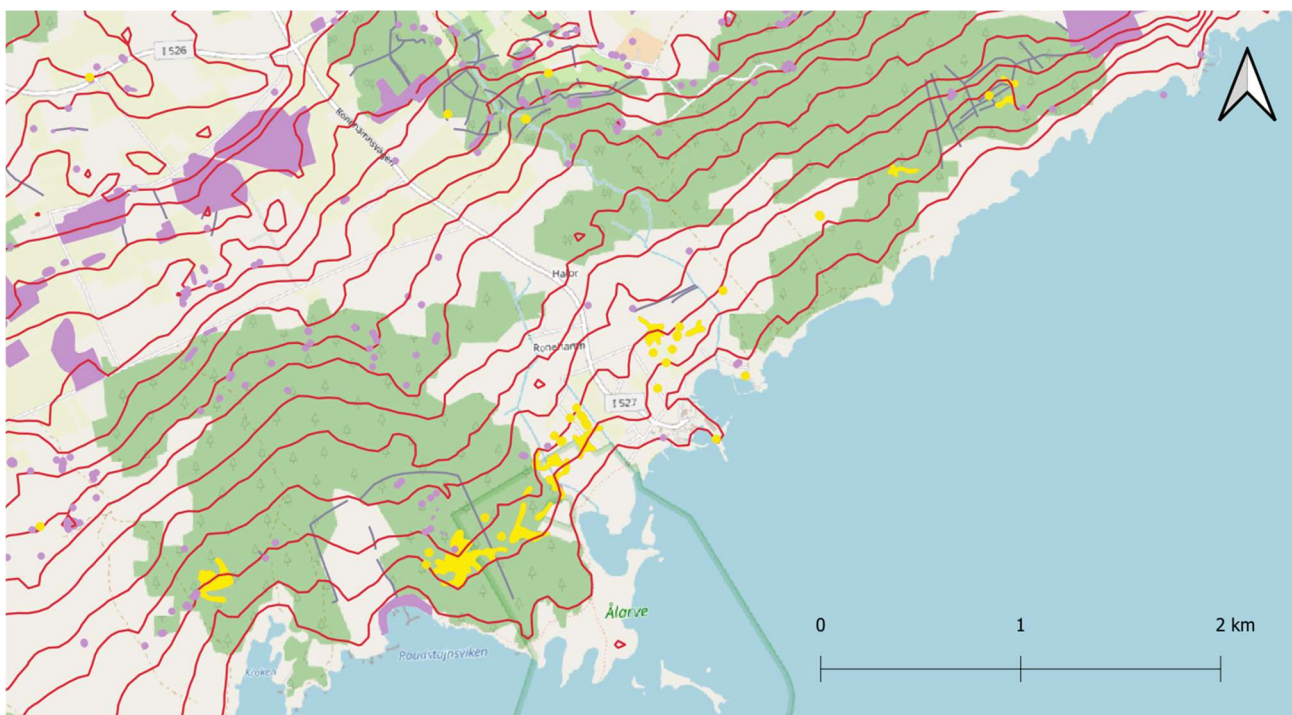


Figure 8. Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Rone.

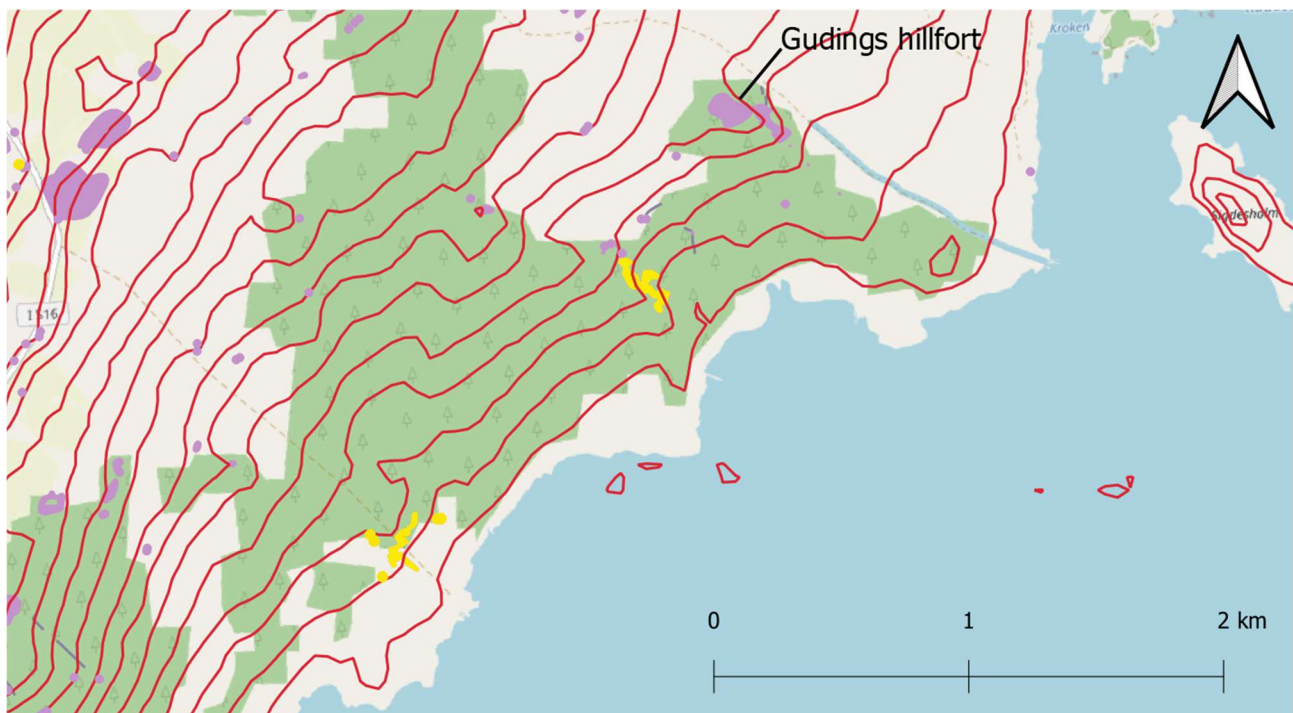


Figure 9. Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Eke.

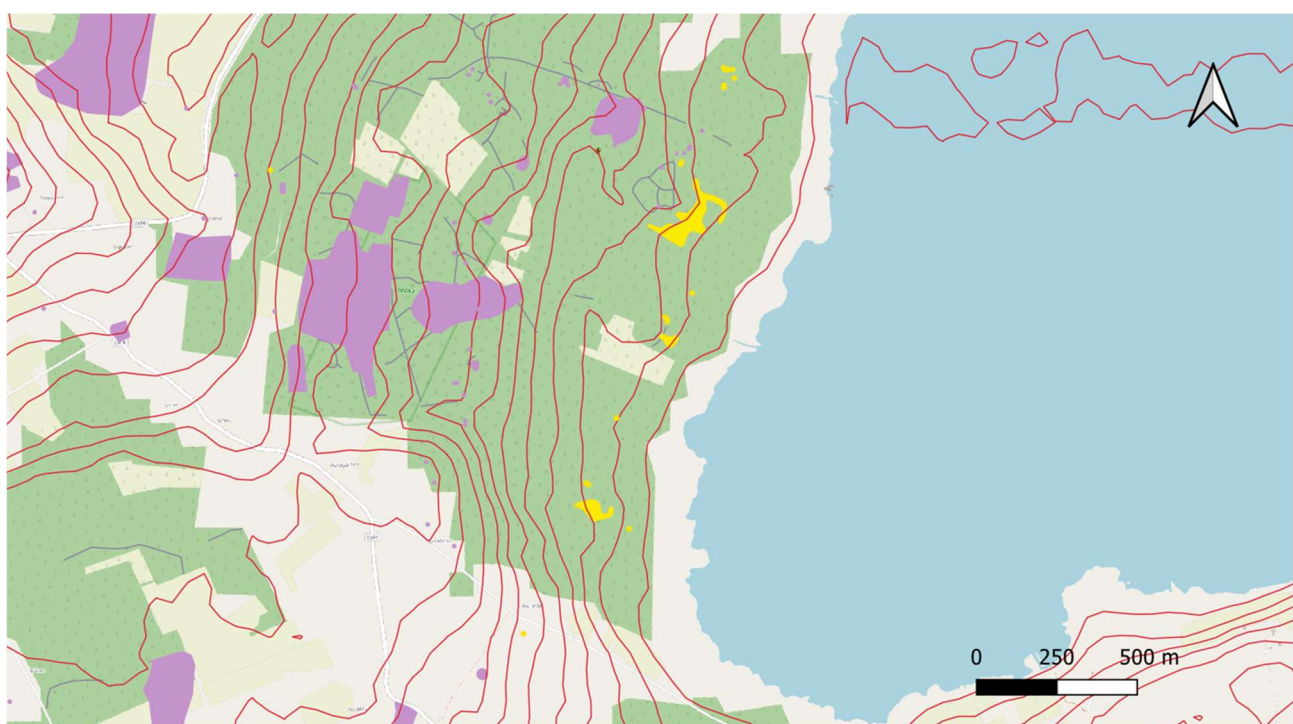


Figure 10. Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Grötlingbo.

Conclusive remarks

Due to the above-mentioned challenges, the results of this study can only be seen as indicative and preliminary. It is also difficult to calculate any possible margin of error, since this would require a larger sampling. Some important points regarding the methodologies used in this study can be made, which would likely benefit any future study on the topic. It seems evident, that it is not always fruitful or possible to use the database of the Swedish National Heritage Board as a source for statistical or perhaps even spatial study regarding the grinding grooves on Gotland. The amount of grinding grooves on Gotland remains questionable before new methods of recording as well as maintaining data in a coherent, consistent manner are discovered and employed.

The function and creation of the grinding grooves can only be speculated and were not exactly at the focus of this study. It is however noteworthy regarding the dating of the grinding grooves as well to state that the areas surrounding their current locations seem to have had long traditions with maritime activities. Based on this it is possible to carefully suggest a practical purpose, even though the many prehistoric maritime motifs with cult status (e.g., certain picture stones and ship settings) found around Gotland should not be forgotten. The lack of mention of the grinding grooves in Guta Saga or any other historical literary sources would also indicate towards this interpretation. Considering the most common height above the sea level for the locations of the grinding grooves in the parishes of Grötlingbo, Eke and Rone, it seems that the phenomena or trend around the grinding grooves had its fluorescence between the years 0 AD. - 1000 AD. Later relocation of the stones is of course possible, however questioned by the author due to the inability of finding any reasonable motive (ideological or pragmatic) or signs from the archaeological records to do so. It seems also evident, that the grinding grooves on Gotland can be from many different traditions from different time periods and thus it can be challenging or perhaps ineffectual to try to determine the differences between these traditions.

An interesting factor is that the results of this study seem to align with the ones regarding the dating of the grinding grooves in Finland. There are also many similarities within the landscapes surrounding the locations of the grinding grooves. Therefore, it would be a reasonable to suggest more studies where the grinding grooves from Gotland would be more systematically compared to the ones found from Finland. More profound studies regarding regional coastal chronologies as well as practical recording of the locations of the grinding grooves on Gotland would however be necessary for future research.

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Illustrations

Figure 1. *The stones with grinding grooves on Gotland according to Gannholm (Gannholm, 2020: 46).*

Figure 2. *Estimated locations of the medieval harbours in the parishes of Grötlingbo, Eke and Rone (©Lantmäteriet, Region Gotland).*

Figure 3. *The fishing hamlets of Petsarvebod and Ronningsbod marked with red circles (©Lantmäteriet, edited by the author).*

Figure 4. *The fishing hamlets of Bybod, Djaupkrok and Kroken marked with red circles (©Lantmäteriet, edited by the author).*

Figure 5. *The fishing hamlets of Kroken, Raudstajn and Ronehamn marked with red circles (©Lantmäteriet, edited by the author).*

Figure 6. *Three of the stones with grinding grooves in Finland. The grinding grooves are marked with the stars, sites dated to Iron Age are marked with a blue dot, diamond and a triangle pointing upwards (Aalto, 2020: 14).*

Figure 7. *Number of the sites with grinding grooves in the parishes of Grötlingbo, Eke and Rone. Made by the author.*

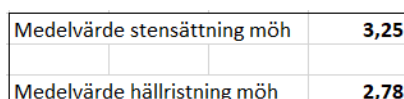
Figure 8. *Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Rone. Made by the author.*

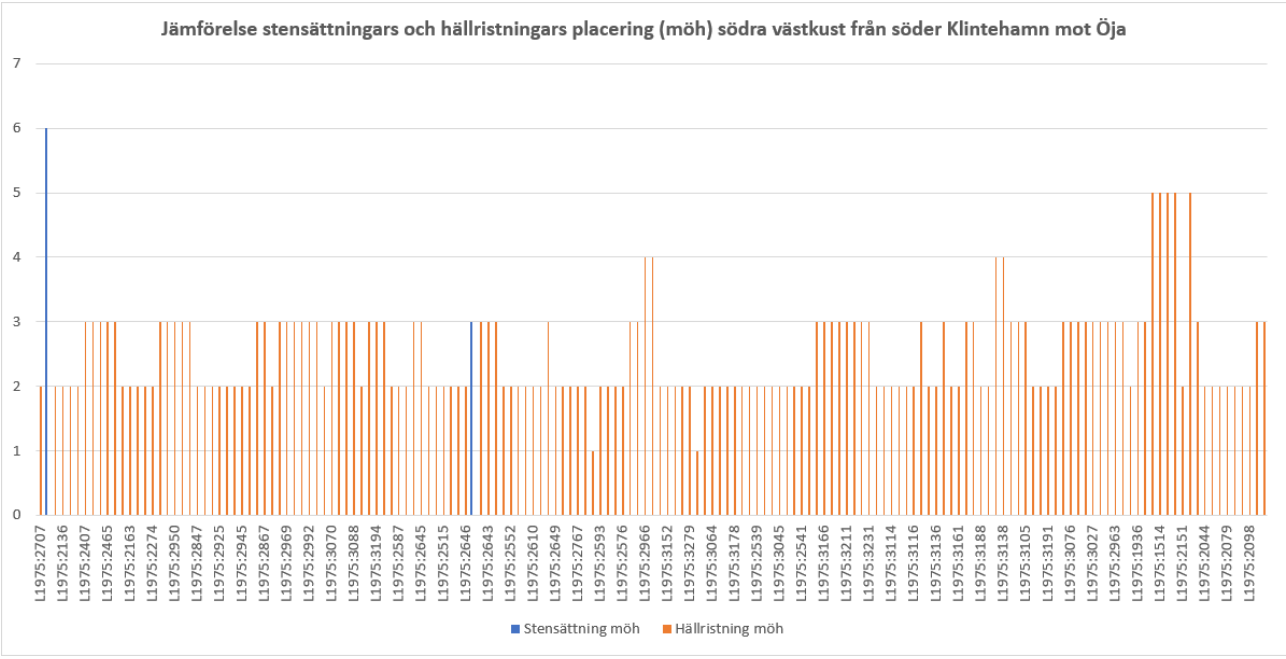
Figure 9. *Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Eke. Made by the author.*

Figure 10. *Height curves (red) in relation with the grinding grooves (yellow) and other ancient monuments and sites (light purple) in Grötlingbo. Made by the author.*

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De aktuella nivåerna framgår av diagrammen nedan.





Medelvärde stensättningar möh	4,5
Medelvärde hållristningar möh	2,5



Aktuellt undersökningsområde

Undersökningsgruppen under arbete

