frameset.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN">
<html>
<head>
<title>Interaktiva nycklar</title>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
<meta name="author" content="Magnus Lindh">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head>
<frameset rows="110, *" border=0>
            <frame name="top" src="top.php">
            <frame name="mainframe" src="frameset2.html">
</frameset>
</html>
```

top.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head>
<body bgcolor="#809980">
<table width="100%" height="100%" border="0" cellpadding="0" align="center" valign="top">
<tr><td rowspan="2" valign="bottom" ><a href="http://www.artdata.slu.se/Svenska_artprojektet"
target="_top"><img src="images/Artprojeket_logo_text.gif" alt="Svenska artprojektet" border="0"
width="120"></a></td>
<td colspan="5" align="center" valign="top"><big><big><b>Knappnålslavar i
Norden          </big></big></b></td></tr>
<tr>
<td valign="bottom" align="center"> <a href="helptour.html" target="mainframe">Hur g&ouml;r
man?</a> </td>
<td valign="bottom" align="center"> <a href="frameset2.html" target="mainframe">B&ouml;rja om
artbest&auml;mning</a> ></td>
<td valign="bottom" align="center"> <a href="about_phpkey.html" target="mainframe">Om
Interaktiva nycklar</a> </td>
<td valign="bottom" align="center"> <a href="about_dataset.html" target="mainframe">Om
Knappn&aring;lslavar</a> </td>

</body>
</html>
```

frameset2.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Frameset//EN">
<html>
<head>
<title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
<meta name="author" content="Magnus Lindh">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head>
<frameset cols="*, 220" border=1>
            <frame name="main" src="char_choice.php">
            <frame name="result" src="result.php">
</frameset>
</html>
```

char_choice.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head><title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head><body bgcolor="#ffffcc">
<form action="result.php" target="result">
<?php
// Name:char_choice.php
// Author:Magnus Lindh, Master thesis student 2003 at
// Swedish University of Agricultural sciences, Dep. of Conservation biology
// Last updated: 16 June 2003
// This file should be shown in the main frame. It recievs following
// settings from the result.php: Earlier used states, species reamaining,
// earlier used error tolerance, the variablewhich tells if to show pictures
// or not and a variable which tells how to order the characters.
// It sends error tolerance and checked states to the result file.
// It can also open a window for help explanations about characters, the file
// char_help.
```

```
//Create database connection.
$db = mysql_pconnect("localhost", "user","password" ) or die("Could not connect to Database" );
mysql_select_db("test3",$db);


// Recieve settings, earlier used characters and remaining species. Sort them
// into different variables and arrays. If a setting is null set it to
// standard value.
unset($species_left_array);
if (!isset($used_states_string)){$used_states_string="";}
foreach($_REQUEST as $name => $value){
  if (ereg("select", $name)){
     $used_states[]=$value;
     $used_states_string = $used_states_string . $value . ", ";
  }else{
    switch ($name){
      case 'pictures':
      $pictures = $value;
      echo "<input type=\"hidden\" name=\"pictures\" value=\"$value\">";
      break;
      case 'rank_by':
      $rank_by = $value;
      echo "<input type=\"hidden\" name=\"rank_by\" value=\"$value\">";
      break;
      case 'error_tolerance':
      $error_tolerance = $value;
      break;
      case ($name>0):
             if ($value == "state"){
               $used_states[]=$name;
               $used_states_string = $used_states_string . $name . ", ";
             }else{
               $species_left_array[]=$name;
             }
      break;
      default:
      break;
    }}}
if (!isset($rank_by)){$rank_by='best_char';}
if (!isset($pictures)){$pictures='with_pictures';}
if (!isset($species_left_string)){$species_left_string="";}
if (!isset($species_left_querystring)){$species_left_querystring="";}
if (!isset($used_states)){$used_states=null;}


// Create the species left string for the rank character function.
// If first time, set species left to all species.
if (!isset($species_left_array)){
  $species_left_query=mysql_query("SELECT species_id FROM speciesinfo ORDER BY species_id") or die
("No god species_left query");
  while ($row = mysql_fetch_array($species_left_query)){
    $species_left_array[]=$row["species_id"];
  }}



$species_left = count($species_left_array);
foreach ($species_left_array as $value){
  $species_left_string = $species_left_string . " species_id = " . $value . " or";}
$species_left_querystring= (eregi_replace(" or$", "", $species_left_string));


// Get the characters of the used states and make them into a array.
if ($used_states != null){
  foreach ($used_states as $name){
    $used_characters_query = "SELECT * FROM charinfo, stateinfo WHERE
charinfo.char_id=stateinfo.char_id and stateinfo.state_name = '$name'";
    $used_characters = mysql_query($used_characters_query) or die ("No god used_characters_query");
    while ($row = mysql_fetch_array($used_characters)){
      $used_char_array[] =$row['char_id'];
    }}}


// Get the characters and sort them by the choosen rank_by variable.
if ($rank_by == null){$rank_by = "natural_grouped";}
if ($rank_by == "natural_grouped"){
  $character_query = "SELECT char_id FROM charinfo ORDER BY natural_grouped";}
if ($rank_by == "alfabetical"){
  $character_query = "SELECT char_id FROM charinfo ORDER BY char_name";}
if ($rank_by == "best_char"){
  $character_query = "SELECT char_id FROM charinfo";}


// Make an array of all characters.
$character = mysql_query($character_query) or die("No god character_query.");
while ($char_array = mysql_fetch_array($character)){
  $char_id_array[]=$char_array["char_id"];
}


// Make an unused character array of the difference between the all
// characters array and used characters array.
if (!isset($used_char_array)){$used_char_array=null;}
```

```
if ($used_char_array != null){
$unused_char_array = array_diff($char_id_array,$used_char_array);
}else{$unused_char_array = $char_id_array;
}

// If the characters should sorted by the best character, use the rank_chars
// function. Else are the characters already sorted in the SQL query.
if ($rank_by == "best_char"){$sorted_unused_char_array = & rank_chars($unused_char_array,
$species_left_querystring, $species_left);
}else{
  $sorted_unused_char_array = $unused_char_array;}


// Merge the unused character array and the used character array.
if ($used_char_array != null){
$sorted_char_array = array_merge($sorted_unused_char_array,$used_char_array);
}else{$sorted_char_array = $sorted_unused_char_array;
}


// Make an array of the sorted characters array where the character id
// is the key and the real character name is the value.
foreach ($sorted_char_array as $char){
  $char_id = $char;
  $char_query = "SELECT char_name, char_id FROM charinfo WHERE char_id = '$char_id'";
  $char_ = mysql_query($char_query) or die ("No god query for char_name");
  while ($row = mysql_fetch_array($char_)){
    $sorted_char_array_full[$char_id] = $row['char_name'];
  }
}


// Print fast links to the different characters.
echo "<a name=\"up\"></a><b>Snabblänk till: </b><font size=\"-1\">";
foreach ($sorted_char_array_full as $char_id => $char_name){
  echo " | <a href=\"#$char_id\">" . $char_name . "</a> ";}


// Set the error tolerance to the currently used error tolerance and print
// the select menu.
if (!isset($error_tolerance)){$error_tolerance='0';}
switch ($error_tolerance){
 case '0':
   $nullselected = 'selected';
   break;
 case '1':
   $oneselected = 'selected';
   break;
 case '2':
   $twoselected = 'selected';
   break;
 case '3':
   $threeselected = 'selected';
   break;
 default:
   $nullselected = '';
   $oneselected = '';
   $twoselected = '';
   $threeselected = '';
   break;
}
echo "</font><br><b>Inställningar:</b>    Feltolerans: ";
echo "<select name=\"error_tolerance\" size=\"1\">";
echo "<option value=\"0\" $nullselected>0</option><option value=\"1\"
$oneselected>1</option><option value=\"2\" $twoselected>2</option><option value=\"3\"
$threeselected>3</option>";
echo "</select><br><hr>";


// Print the characters och their states. The input type decides what
// type to use. Checkbox uses the print_states_checkbox function and the the
// select menu the print_states_selectmenu function.
foreach ($sorted_char_array_full as $charid => $charname){
  $char_id = $charid;
  $char_name = $charname;
  $input_type_query = mysql_query("SELECT input_type FROM charinfo WHERE char_id = '$char_id'") or
die ("No god input_type query");
  $input_type_fetch = mysql_fetch_array($input_type_query);
  $input_type = $input_type_fetch["input_type"];
  echo "<a name=\"" . $char_id . "\"></a><table border=\"0\" cellpadding=\"0\"
width=\"100%\"><tr><td><b>";
    echo $char_name . "     <a
href=\"char_help.php?char_id=$char_id&input_type=$input_type\" target=\"_blank\"
onclick=\"window.open(this,'new','width=600,height=400,scrollbars=yes,resizable=yes'); return
false\"><img src=\"images/questionmark.gif\" align=\"top\" height=\"20\" border=\"0\"></a>";
    echo "</td><td align=\"right\"><a href=\"#up\">Upp</a>    <a
href=\"#down\">Ner</a>    ";
    echo "<input type=\"submit\" value=\"Sök\">";
    echo "</b></td></tr></table>";
    echo "<table border=\"0\" cellpadding=\"5\"><tr>";

    if ($input_type == 'selectmenu'){
    print_states_selectmenu($char_id, $used_states_string, $pictures);
```

```
    }else{
      print_states_checkbox($char_id, $used_states_string, $pictures);
    }
    echo "</tr></table><hr>";
}
echo "<a name=\"down\"></a>";


// FUNCTIONS ////////////////////////////////////////////////////////

// This function prints the state name, makes a checkbox named "state_name"
// and shows the picture (if one exist) for the current character.
function print_states_checkbox($char_id, $used_states_string, $pictures){
  $state_query = "select * from stateinfo, charinfo where stateinfo.char_id = charinfo.char_id and
stateinfo.char_id = '$char_id' ORDER BY stateinfo.internal_order";
  $state = mysql_query($state_query)or die("No god query for state names!!");
  while ($blaj = mysql_fetch_array($state)){
    echo "<td align=\"center\" >";
    echo $blaj["state_realname"];
    echo "</td>";
  }
  echo "</tr><tr align=\"center\">";
  $state = mysql_query($state_query)or die("No god query!");
  while ($blaj = mysql_fetch_array($state)){
    $ab= $blaj["state_name"];
    echo "<td>";
    if (ereg($ab, $used_states_string)){$rs='checked';}else{$rs="";}
    echo "<input type=\"checkbox\" name=\"$ab\" value=\"1\" $rs>";
    echo "</td>";
    }
  echo "</tr><tr>";
  $state = mysql_query($state_query) or die("No god query!");
  if ($pictures == "with_pictures"){
    while ($blaj = mysql_fetch_array($state)){
      $cd= $blaj["image"];
      if ($cd == null){echo "<td></td>";}else{
              echo "<td align=\"center\">";
              echo "<img src=\"$cd\" alt=\"$ab\" height=\"120\" width=\"90\">";
              echo "</td>";
              }}}}

// This function prints the state names in a selectmunu if the input_type =
// selectmenu for the current character.
function print_states_selectmenu ($char_id, $used_states_string, $pictures){
$state_query = "select * from stateinfo, charinfo where stateinfo.char_id = charinfo.char_id and
stateinfo.char_id = '$char_id'ORDER BY stateinfo.internal_order";
 $state = mysql_query($state_query) or die("No god query for state names!!!!");
 $string = "";
 while ($blaj = mysql_fetch_array($state)){
   $char_image = $blaj["char_image"];
   $ab = $blaj["state_name"];
   $select_name = "select" . $ab;
   if (ereg($ab, $used_states_string)){$selected='selected';}else{$selected="";}
   $string = $string . "<option value=\"" . $ab . "\" " . $selected . ">" . $blaj["state_realname"]
. "</option>";
 }
 echo "<td valign=\"top\"><select name=\"$select_name\" size=\"1\"><option value=\"not\"> - - - -
</option>" . $string . "</select></td>";
 if ($pictures == "with_pictures"){
   if ($char_image != Null){
     echo "<td>     <img src=\"$char_image\" alt=\"image\" align=\"top\"></td>";
   }}}


// This function orders the characters by this best character algoritm for
//
function &rank_chars($unused_char_array, $species_left_querystring, $species_left){
foreach ($unused_char_array as $char){
  $char_id = $char;
  $state_query = "SELECT state_name, relyability FROM stateinfo, charinfo WHERE stateinfo.char_id =
charinfo.char_id and stateinfo.char_id = '$char_id'";
  $state = mysql_query($state_query) or die("No god query for state names!!!21!");
  unset($count_discarded_array);
  while ($row = mysql_fetch_array($state)){
    $relyability = $row['relyability'];
    $current_state = $row["state_name"];
    $count_discarded_query = "SELECT COUNT(*) FROM species_state WHERE (($current_state = '0')) and
($species_left_querystring)";
    $count_discarded = mysql_query($count_discarded_query) or die("No god count discarded query");
    while ($row = mysql_fetch_array($count_discarded)){
      $count_current_discarded = $row["COUNT(*)"];
    }
    if ($count_current_discarded == $species_left){$count_current_discarded = 0;}
    if ($count_current_discarded == 0){$coefficient = 0 ;
    }else{$coefficient = (($count_current_discarded/$species_left)/5);}
    $count_discarded_array [$current_state] = (($count_current_discarded/$species_left) +
$coefficient);
  }
  $mean_count_char_array[$char_id] =
((array_sum($count_discarded_array))/(count($count_discarded_array)) +
(($relyability/10)*(array_sum($count_discarded_array))/(count($count_discarded_array))));

  foreach ($mean_count_char_array as $name => $value){
```

```
    $rank_value[$name] = number_format(($value * 10),3);}
}
 arsort($rank_value);

 foreach ($rank_value as $name => $value){
  $sorted_unused_char_array[]=$name;
}
return $sorted_unused_char_array;
}
?>
</form>
</body></html>
```

result.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head><title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head><body bgcolor="#ffffcc">
<form action=char_choice.php target="main">
<?php

// Name:result.php
// Author:Magnus Lindh, Master thesis student 2003 at
// Swedish University of Agricultural sciences, Dep. of Conservation biology
// Last updated: 16 June 2003
// This file recieves charactertates, error tolerance and the earlier settings
// for rank_by and pictures. Then it prints the species names fulfilling the
// states. It consists of to forms. The upper form sends the used states,
// speices id's and the settings rank_by, pictures and earlier used error
// tolerance. The lower form sends the species id's to the compare file.


// Set standard values to the variables.
if (!isset($rank_by)){$rank_by='best_char';}
if (!isset($pictures)){$pictures='with_pictures';}
$string = "(( 0 ";
$count_states = 0;
unset($last_name);


// Recieve variables from char_choice and sort them. The character states
// are saved in the upper form as hidden and made to string for the SQL query.
foreach($_REQUEST as $name => $value){
  if (ereg("select",$name)){
    if ($value !="not"){
      $count_states = $count_states + 1;
      $string = $string . ") + (" . $value . " = '1' or " . $value . " = '?' ";
      echo "<input type=\"hidden\" name=\"$name\" value=\"$value\">";}
    else{$string = $string;}
  }else{
    switch ($name){
    case 'error_tolerance':
      $error_tolerance = $value;
      echo "<input type=\"hidden\" name=\"error_tolerance\" value=\"$value\">";
      break;
    case 'pictures':
      $pictures = $value;
      echo "<input type=\"hidden\" name=\"pictures\" value=\"$value\">";
      break;
    case 'rank_by':
      $rank_by = $value;
      echo "<input type=\"hidden\" name=\"rank_by\" value=\"$value\">";
      break;
    case ($name != ""):
      if (!isset($last_name)){$last_name="";}
      $comp = strncmp($name,$last_name,3);
      if ($comp == 0){
             $count_states = $count_states;
             $string = $string . " or " . $name . " = '1' or " . $name . " = '?'";
             echo "<input type=\"hidden\" name=\"$name\" value=\"state\">";
             $last_name = $name;
      }else{
             $count_states = $count_states + 1;
             $string = $string . ") + (" . $name . " = '1' or " . $name . " = '?' ";
             echo "<input type=\"hidden\" name=\"$name\" value=\"state\">";
             $last_name = $name;
      }
      break;
    default:
      break;
    }}}

// Make the rank_characters and pictures select menu. Make the current
// setting selected.
switch ($rank_by){
 case 'best_char':
   $bestselected = 'selected';
   break;
 case 'alfabetical':
```

```
    $alfaselected = 'selected';
    break;
 case 'natural_grouped':
    $natselected = 'selected';
    break;
 default:
    $bestselected = '';
    $alfaselected = '';
    $natselected = '';
    break;
}
switch ($pictures){
 case 'with_pictures':
    $withpicselected = 'selected';
    break;
 case 'no_pictures':
    $nopicselected = 'selected';
    break;
 default:
    $withpicselected = '';
    $nopicselected = '';
    break;
}
if (!isset($nopicselected)){$nopicselected="";}
if (!isset($withpicselected)){$withpicselected="";}
echo "Ordna karaktärer efter:<br><select name=\"rank_by\" size=\"1\">";
echo "<option value=\"best_char\" $bestselected>Bästa Karaktär</option>";
echo "<option value=\"natural_grouped\" $natselected>Naturligt grupperade</option>";
echo "<option value=\"alfabetical\" $alfaselected>Alfabetiskt</option></select><br><br>";
echo "<select name=\"pictures\" size=1><option value=\"with_pictures\" $withpicselected>Med
bilder</option><option value=\"no_pictures\" $nopicselected>Utan bilder</option></select><br><br>";
echo "<input type=\"submit\" value=\"Ordna karaktärer\"><br><br>";


// Print this message if no characters were chosen. Else run the rest of
// the program.
if ($string == "(( 0 ") {
echo "Inga karakt&auml;rer valda.<br>";
echo "V&auml;lj karakt&auml;rer och tryck på Sök-knappen. <br>";
}
else
{


// Create the string for the select query.
$string = $string . ") >= ($count_states- $error_tolerance))";


// Create database connection.
$db = mysql_pconnect("localhost", "user", "password" ) or die("Could not connect to Database" );
mysql_select_db("test3",$db);


// Count the total number of species.
 $total_number_species_query = mysql_query("SELECT COUNT(*) FROM species_state");
 while ($row = mysql_fetch_array($total_number_species_query)){
    $total_number_species = $row["COUNT(*)"];
 }

 // State querys.
 $state_query = "SELECT * FROM species_state, speciesinfo WHERE species_state.species_id =
speciesinfo.species_id and ($string) order by speciesinfo.species_name_latin";
 $states = mysql_query($state_query) or die("No god query.1");


 // Save species_id for the rank_character function in the upper form.
 while ($row = mysql_fetch_array($states)){
    if (!isset($count_species)){$count_species=0;}
    $count_species = $count_species + 1;
    $gh = $row['species_id'];
    echo "<input type=\"hidden\" name=\"$gh\" value=\"id\">";
 }

 // Print species names of the species fullfilling the states. The
 // checkboxes are for the lower form which sends info to the compare file.
 if (!isset($count_species)){$count_species=0;}
 echo  "</form>" . $count_species . " arter av totalt " . $total_number_species . ".<br><form
target=\"main\" action=\"compare.php\">";
 $states = mysql_query($state_query) or die("No god query.2" );
 while ($row = mysql_fetch_array($states)){

    $current_species_id =$row['species_id'];
    $current_species_name = $row['species_name_latin'];
    echo "<input type=\"checkbox\" name=\"$current_species_id\" value=\"1\">";
    echo "<i><small><a href=\"spec_desc.php?spec_id=$current_species_id\"
target=\"main\">$current_species_name</a></i></small><br>";
 }
 echo "<br><input type=\"submit\" value=\"J&auml;mf&ouml;r\"><br>";
 echo "<br></form>";


}
```

```
?>
</body></html>
```

spec_desc.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head><title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head><body bgcolor="#ffffcc">
<?php
// Name:spec_desc.php
// Author:Magnus Lindh, Master thesis student 2003 at
// Swedish University of Agricultural sciences, Dep. of Conservation biology
// Last updated: 16 June 2003
// This file prints information about the choosed species. It only
// recives the current species_id.


//Create database connection.
$db = mysql_pconnect("localhost", "user", "password" ) or die("Could not connect to database" );
mysql_select_db("test3",$db);


// Recieve the species_id and get information about the current species
// and put it into variables.
$spec_id = $_GET['spec_id'];
$species_query = mysql_query("SELECT * FROM speciesinfo WHERE species_id = $spec_id") or die ("No
god species query");
while ($row = mysql_fetch_array($species_query)){
  $spec_desc = $row['species_description'];
  $spec_name = $row['species_name_latin'];
  $spec_image = $row['species_image1'];
  $danish = $row['species_name_danish'];
  $finnish = $row['species_name_finnish'];
  $norwegian = $row['species_name_norwegian'];
  $swedish = $row['species_name_swedish'];
}

// Print the latin name and the nordic names if they are not null.
echo "<br><h3 align=\"center\"><b><i>" . $spec_name . "</i></b></h3><br>";
echo "<table border=\"0\" width=\"95%\"><tr valign=\"top\"><td>";
echo $spec_desc . "<br><br>";
if ($danish != null){echo "<img src=\"images/danmark.gif\" alt=\"DK:\"> " . $danish;}
if ($finnish != null){echo "<br><img src=\"images/finland.gif\" alt=\"FIN:\"> " . $finnish;}
if ($norwegian != null){echo "<br><img src=\"images/norge.gif\" alt=\"NO:\"> " . $norwegian;}
if ($swedish != Null){echo "<br><img src=\"images/sverige.gif\" alt=\"SE:\"> " . $swedish;}



echo "</td><td>";
if ($spec_image != null){
  echo "<img src=\"$spec_image\" alt=\"Picture $spec_name\" align=\"right\">";
}else{
  echo "<img src=\"images/ingenbild.jpg\" alt=\"ingen bild tillgänglig\" align=\"right\"";
}
echo "</td></tr></table>";


// Print all characters and the fullfilled states.
$character_name_query = "SELECT char_id, char_name FROM charinfo";
$character_name = mysql_query($character_name_query) or die ("No god query for charcter");
while ($row = mysql_fetch_array($character_name)){
  $current_char_name = $row['char_name'];
  $current_char_id = $row['char_id'];
  $char_array[$current_char_id]=$current_char_name;
}
echo "<table width=\"95%\">";
foreach ($char_array as $name => $value){
  unset($string);
  $char_id = $name;
  $char_name = $value;
  echo "<tr valign=\"top\"><td width=\"30%\"><b>" . $char_name . ": </b></td><td>";
  $state_name_query = "SELECT * FROM stateinfo where char_id = $char_id ORDER BY internal_order";
  $state_name = mysql_query($state_name_query) or die ("No god query for State name");
  while ($row = mysql_fetch_array($state_name)){
    $state = $row['state_name'];
    $state_realname = $row['state_realname'];
    if (!isset($string)){$string='';}
    $state_fullfilled_query = "SELECT * FROM species_state WHERE species_id = $spec_id and $state =
'1'";
    $state_fulfilled = mysql_query($state_fullfilled_query) or die ("No god query for State
fulfillment");
    if ($row = mysql_fetch_array($state_fulfilled)){
      $string = $string . $state_realname . ", ";
    }else{($string = $string);}
  }
  $string = eregi_replace(", $","",$string);
  echo $string . "</td></tr>";
}
```

```
?>
</body></html>
```

compare.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head><title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
</head><body bgcolor="#ffffcc">
<?php
// Name:compare.php
// Author:Magnus Lindh, Master thesis student 2003 at
// Swedish University of Agricultural sciences, Dep. of Conservation biology
// Last updated: 16 June 2003
// This file prints a tableof all characters and the fulfilled states
// for the choosed species. The characters are ordered by the rank best
// character algoritm. It only recieves the species id numbers.


//Create database connection.
$db = mysql_pconnect("localhost", "user", "password" ) or die("Could not connect to Database" );
mysql_select_db("test3",$db);


// Recieve the species id numbers.
foreach($_REQUEST as $name => $value){
  $species_id = $name;
  $species_array[]= $species_id;
}


// If no species where checked print this information and escape.
if (!isset($species_array)){
  echo "Inga arter valda!<br>Kryssa för de arter du vill jämföra till höger och tryck på
jämförknappen.";
}else{


// Create the haeding row (Species names) in the compare table.
  echo "<br>Samtliga karaktärer för valda arter. Karaktärerna är ordnade med de bästa
överst.<br><br>";
  echo "<table border=\"1\"><tr><td><b>Karakt&auml;r</b></td>";
    foreach ($species_array as $species_id){
    $species_name_query = "SELECT * FROM speciesinfo where species_id=$species_id";
    $species_name = mysql_query($species_name_query) or die("No god query for Species Name " );
    while ($row = mysql_fetch_array($species_name)) {
      echo "<td><b><i>" . $row['species_name_latin'] . "</i></b></td>";
    }
  }

    // Create the species array and count the species.
    $species_left = count($species_array);
    foreach ($species_array as $species){
      if (!isset($species_left_string)){$species_left_string='';}
      $species_left_string = $species_left_string . " species_id = " . $species . " or";}
    $species_left_querystring = (eregi_replace(" or$", "", $species_left_string));
    echo "</tr>";


    // For each character print the fullfilled states for the current species.
    $character_name_query ="SELECT * FROM charinfo";
    $character_name = mysql_query($character_name_query) or die ("No god query for charcter");
    while ($row = mysql_fetch_array($character_name)){
          $unused_char_array[]=$row['char_name'];
    }
        $sorted_unused_char_array = & rank_chars($unused_char_array, $species_left_querystring,
$species_left);

    foreach ($sorted_unused_char_array as $char){
      $char_name = $char;
      echo "<tr><td><b>" . $char_name . "<b></td>";
      $character_name_query ="SELECT char_id FROM charinfo WHERE char_name = '$char_name'";
      $character_name = mysql_query($character_name_query) or die ("No god query for charcter");
      while ($row = mysql_fetch_array($character_name)){
            $char_id = $row['char_id'];}
      foreach($species_array as $species_id){
            echo "<td valign=\"top\">";
            $state_name_query = "SELECT * FROM stateinfo where char_id = $char_id ORDER BY
stateinfo.internal_order";
            $state_name = mysql_query($state_name_query) or die ("No god query for State name");
            while ($row = mysql_fetch_array($state_name)){
              $state = $row['state_name'];
              $state_realname = $row['state_realname'];
              $state_fullfilled_query = "SELECT * from species_state where species_id =
$species_id and $state = '1'";
              $state_fulfilled = mysql_query($state_fullfilled_query) or die ("No god query for
State fulfillment");
              if ($row = mysql_fetch_array($state_fulfilled)){
                echo "- " . $state_realname . "<br>";
```

```
                }
              }
              echo "  </td>";
      }
      echo "</tr>";
    }
    echo "</table>";
}


// FUNCTIONS ////////////////////////////////////////////////////////


// This function orders the characters by this best character algoritm for
// remaining species.
function &rank_chars($unused_char_array, $species_left_querystring, $species_left){
  foreach ($unused_char_array as $char_name){
    unset($i);
    $state_query = "SELECT state_name, relyability FROM stateinfo, charinfo WHERE stateinfo.char_id
= charinfo.char_id and char_name = '$char_name'";
    $state = mysql_query($state_query) or die("No god query for state names!");
    unset($count_discarded_array);
    while ($row = mysql_fetch_array($state)){
      $relyability = $row["relyability"];
      $current_state = $row["state_name"];
      $count_discarded_query = "SELECT COUNT(*) FROM species_state WHERE (($current_state = '0'))
and ($species_left_querystring)";
      $count_discarded = mysql_query($count_discarded_query) or die ("No god count discarded
query");
      while ($row = mysql_fetch_array($count_discarded)){
              $count_current_discarded = $row["COUNT(*)"];
      }
      if ($count_current_discarded == $species_left){$count_current_discarded = 0;}
      if ($count_current_discarded == 0){$coefficient = 0 ;
      }else{$coefficient = (($count_current_discarded/$species_left)/5);}
    $count_discarded_array [$current_state] = (($count_current_discarded/$species_left) +
$coefficient);
    }
    $mean_count_char_array[$char_name] =
(((array_sum($count_discarded_array))/(count($count_discarded_array)))+
(($relyability/10)*((array_sum($count_discarded_array))/(count($count_discarded_array)))));

    foreach ($mean_count_char_array as $name => $value){
      $rank_value[$name] = number_format(($value * 10),3);}
  }
  arsort($rank_value);
  foreach ($rank_value as $name => $value){
    $sorted_unused_char_array[]=$name;
  }
  return $sorted_unused_char_array;
}



?>
</body></html>
```

char_help.php

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html><head><title></title>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1">
<meta name="keywords" content="nyckel, key, lavar, lichens, interaktiv, interactive, artbestämning,
identification">
<head><body bgcolor="#ffffcc">
<?php
// Name:char_help.php
// Author:Magnus Lindh, Master thesis student 2003 at
// Swedish University of Agricultural sciences, Dep. of Conservation biology
// Last updated: 16 June 2003
// This file prints the help information about the current character.
// It recives the current charcter id and type of checkbox or selectmenu.


//Create database connection.
$db = mysql_pconnect("localhost", "user", "password" ) or die("Could not connect to Database" );
mysql_select_db("test3",$db);


// Recieve settings and put them into variables.
$char_id = $_GET['char_id'];
$input_type = $_GET['input_type'];


// Get the information abour the current character.
$charinfo_query = "SELECT * FROM charinfo WHERE char_id='$char_id'";
$charinfo = mysql_query($charinfo_query) or die ("No god charinfo_query");
while ($row= mysql_fetch_array($charinfo)){
  $char_desc = $row['char_description'];
  $char_name = $row['char_name'];
}
```

```
// Print the character information and the states.
echo "<h3 align=\"center\">" . $char_name . "</h3><br>";
echo $char_desc . "<br><br><b>Karaktärsstadier: </b><br>";
echo "<table cellpadding=\"8\"><tr>";
if ($input_type == 'selectmenu'){
  print_states_selectmenu($char_id);
}else{
  print_states_checkbox($char_id);
}
echo "</tr></table>";
echo "<a name=\"down\"></a>";


// FUNCTIONS ////////////////////////////////////////////////


// This function prints the state name, makes a checkbox named "state_name"
// and shows the picture (if one exist) for the current character.
function print_states_checkbox($char_id){
  $state_query = "select * from stateinfo, charinfo where stateinfo.char_id = charinfo.char_id and
stateinfo.char_id = '$char_id' ORDER BY stateinfo.internal_order";
  $state = mysql_query($state_query) or die("No god query for state names!!");
  while ($blaj = mysql_fetch_array($state)){
    echo "<td align=\"center\">";
    echo $blaj["state_realname"];
    echo "</td>";
  }
    echo "</tr><tr>";
  $state = mysql_query($state_query) or die("No god query!");
  while ($blaj = mysql_fetch_array($state)){
    $cd= $blaj["image"];
    if ($cd == null){echo"<td></td>";}else{
      echo "<td align=\"center\">";
      echo "<img src=\"$cd\" width=\"90\" height=\"120\" alt=\"image\">";
      echo "</td>";
    }}}


// This function prints the state names in a selectmunu if the input_type =
// selectmenu for the current character.
function print_states_selectmenu ($char_id){
$state_query = "select * from stateinfo, charinfo where stateinfo.char_id = charinfo.char_id and
stateinfo.char_id = '$char_id' ORDER BY stateinfo.internal_order";
 $state = mysql_query($state_query) or die("No god query for state names!!!!");
 $string = "";
 echo "<table><tr><td>";
 while ($blaj = mysql_fetch_array($state)){
   $char_image = $blaj["char_image"];
   echo " - " . $blaj["state_realname"] . "<br>";
}
 echo "</td><td valign=\"top\">";
 if ($char_image != null){
   echo "<img src=\"$char_image\" alt=\"image\" valign=\"top\">";
  echo "</td></tr></table>";
 }
}


?>
</body></html>
```