## HOW THE LIMITED ENTRY HUNTING (LEH) SYSTEM WORKS

Except for submitting an application and receiving an authorization, most hunters are not aware of many aspects of the LEH system. This pamphlet outlines how the system works.

### THE START: SETTING THE LIMITED ENTRY REGULATIONS

In January, regional Wildlife Biologists review information from the previous year's hunts, population status of individual herds, changes in habitat, changes in access, previous weather conditions and many other factors that may affect a particular herd or hunt area. From this information, the biologists formulate site and species LEH regulations for the coming season. These are submitted as recommendations to the Wildlife Management Section in Victoria for review and approval by the Director.

When the regulations are approved, the process of preparing the LEH Synopsis begins. All regulations are translated into specific hunt descriptions and, in some cases maps of special areas are prepared. Included in the synopsis are current instructions on how to apply for Limited Entry Hunts. The LEH Synopsis and LEH applications cards are distributed to hunting licence issuers in April. Hunters purchase the application cards and submit them by mail. All applications must be received by the Wildlife Branch by the application card deadline date to be eligible for the draw. The deadline date can be found on the front page of the current synopsis.

### PROCESSING APPLICATIONS RECEIVED FROM HUNTERS

Each year, some 164,000 applications are expected. During the period applications are being received, several activities are undertaken by Wildlife Branch personnel. All applications are visually checked for completeness, put into batches of a specific number and recorded. The batches are then sent to a private firm where the information is transferred to a computer file. This procedure goes on daily until the final day for receipt of applications. All of the information transferred to computer is processed by special programs to check each application to ensure it is correct and meets the requirements for inclusion in the draw.

### ROUTINE CHECKING OF APPLICATIONS

During the process of checking the applications, many are found to contain one or more errors made by the hunter. Wildlife staff make every effort possible to correct these errors, sometimes even contacting the hunter by telephone. In the end, though, it is the hunter's care and attention in filling out the application that determines its qualification for the draw. Common causes of rejection of applications include incorrectly entering name or Hunter Number, illegible entries and failing to indicate what hunts are desired. Hunters should check their applications carefully before mailing them to us.

Other checks of the applications are also made. These include validating Hunter Numbers and ensuring that only one application is submitted per species. Applications failing these checks are disqualified. Throughout all processing, the applications are carefully tracked to ensure that no one is overlooked. After all the applications have been ascertained to be valid, they are stored on a special computer file. The order that the applications are recorded on this computer file is irrelevant to the draw process.

### ENHANCED ODDS

Over the years, many unsuccessful Limited Entry applicants have suggested that the draw should be changed to increase the chances of those who were previously not drawn. In 1993, a new 'enhanced odds' system was introduced, on a trial basis, for elk in the Kootenays (Region 4). The new system reduced (by up to 50%) the likelihood of being drawn for elk anywhere in Region 4 if the applicant had been drawn in the previous year. Thus, by reducing the chances of being drawn for previously successful applicants, this system improved the odds for those who had been unsuccessful. It is important to note that previously successful people could still be drawn, but their chances were reduced compared to those who had not been previously drawn.

After a three year trial period and consultation with the B.C. Wildlife Federation, this system was introduced province wide for all species except for mule deer and white-tailed deer. Anyone who submits an application for a species (other than mule deer) they were drawn for the previous year has their chance of being drawn reduced by 50% compared to a previously unsuccessful applicant. In the case of moose and (Roosevelt) elk in Regions 1 & 2, anyone drawn in the previous three years will have their chances reduced by 66%.

### THE DRAW:

# 1. THE COMPUTER CHECKS ALL APPLICANTS FOR PREVIOUS SUCCESS

When all application errors have been resolved and all applications have been placed in the computer file, it is time to run the draw.

Immediately prior to the draw, a special computer program is run which checks all applications against the draw results from the previous year, and for moose applications and Region 1 & 2 elk applications, the draw results from the previous three years. Any applicants who were previously drawn and have applied again for

the same species are noted, and a 'flag' is added to their application record. Only applications from hunters who were previously drawn receive these 'flags'.

# 2. RANDOM NUMBERS CREATED AND ASSIGNED TO INDIVIDUAL APPLICATIONS

Through a command to the computer, a 'seed number' is generated that will be used to initiate the process which creates a random identification number for each application on the computer file. This 'seed number' is automatically generated based upon the time of day, to the tenth of a second, that the command is acted upon by the computer. No person has control over this split second of time, so the production of random numbers ranging from 1 to 2 billion is based upon an initial 'seed number' created purely by chance. After each application is given a random number, the computer then uses this number to reorder the applications on the special computer file sequentially, from the lowest random number to the highest. An individual applicant's name, Hunter Number, address, or when the application was received in the mail, has absolutely no influence on how this file is ordered. The 'luck of the draw' is decided by the random number assigned to any given application. The lower the number, the greater the likelihood of being drawn. This file is now in an order that the computer will use to assign LEH Authorizations.

## 3. THE COMPUTER ASSIGNS AUTHORIZATIONS FOR 'FIRST CHOICE HUNTS

The computer assigns authorizations in the following manner. The computer looks at the first application on the file (the one with the lowest random number), and determines what 'First Choice' hunt is requested. The computer then assigns an authorization for this hunt to the applicant. The computer then moves to the very next application on the file and looks at the 'First Choice' hunt and assigns an authorization for this hunt to the applicant and so on. As this process proceeds, the authorizations available for each hunt gradually become fully allocated. As explained above, some applications are 'flagged' to indicate that the applicant was drawn the previous year. The computer completely ignores every other 'flagged' application it encounters, thus cutting the chances of previously successful applicants by 50% compared to those who were not drawn the previous year. For moose and elk in Regions 1 & 2, it ignores two out of every three flagged applications cutting the odds of previously successful applicants by 66%.

When the computer looks at an application, determines the 'First Choice' hunt requested and finds that authorizations for this hunt have already been fully allocated, the computer immediately moves on to the next application on the file. This step by step process through the applications continues until the last application on the file (the one with the highest random number) has been looked at for 'First Choice' hunt by the computer. When this point is reached, the computer then goes back to the beginning of the file and begins to look at each application again in the order of lowest to highest random number. Once again, the computer goes through the file looking at first choices only, but this time it does not reduce the chances of flagged applications. The reason for this is that the authorizations for some hunts will not have been completely given out on the first pass the computer

makes through the file. If there are authorizations still available, then they are in such low demand that it does not make sense to deny them to previously successful applicants. Very few authorizations are assigned on this pass through the file.

# 4. THE COMPUTER ASSIGNS AUTHORIZATIONS FOR 'SECOND CHOICE' HUNTS

Once again, after having reached the end of the file, the computer returns to the beginning. The computer now looks only at applications that were not assigned authorizations for 'First Choice' hunts. The computer determines from each application, in order, what 'Second Choice' hunt is requested and assigns an authorization to the applicant if there are authorizations still available for this hunt. If this hunt is already fully subscribed, the computer immediately moves on to the next application. This process continues application by application, until all the applications have again been looked at by the computer. At this point, all of the applications have been checked three times by the computer. Again, 'flags' are ignored on this pass through the file.

### 5. HOW GROUP APPLICATIONS ARE HANDLED IN THE DRAW

Throughout the above process, in all of the three passes through the file of applications, Group Applications are treated exactly as an individual application. In other words, only one random number is assigned for a group. If any member of the group is 'flagged' as previously successful, then the entire group is treated as 'flagged'. If the group is drawn, then all members of the group receive authorizations to hunt. However, if the computer looks at a group application and there are too few authorizations still available for the hunt of choice to give each member of the group an authorization, then the entire group is passed over and not assigned any authorizations. The computer then moves to the next application on the file.

### 6. LIMITED ENTRY SHARED MOOSE HUNTS

Limited Entry Shared moose hunts were introduced in the 2001 draw on an experimental basis for late bull hunts in Region 3 only. They are similar to group hunts, but instead of all group members being entitled to take a moose, there is a group limit. Under Limited Entry Shared Hunting, a group of two may take only one moose, while a group of three or four may take two moose. It does not matter which group member actually harvests the moose, but all participating group members must possess a valid moose hunting licence and no individual group member may kill more than one moose.

The idea behind Limited Entry Shared moose hunting is to give more hunters the opportunity to hunt without significantly increasing the number of moose harvested. Applicants are not required to apply for these hunts as part of a group – they may apply as individuals if they wish – but group applications are given a higher chance of being drawn than single applications. Unlike the regular group applications described in the previous section, group Shared Hunt applications enter the draw individually rather than as one. If any member of a group application for a Shared Hunt is drawn, then the entire group is drawn. Therefore, a group of four applying

for a Shared Hunt has four chances to be drawn whereas an individual application has only one chance.

This concept was confined to the pilot project in Region 3 for three years. After the 2003 draw, Limited Entry Shared moose hunts were evaluated and the decision was made to expand them to all moose hunts in all areas of the province, commencing with the 2004 draw.

## FOLLOW-UP TO THE DRAW: NOTIFICATION OF APPLICANTS

After the completion of the draw, the computer is requested to print on special forms, all the LEH authorizations that were assigned. These authorizations will contain the applicant's name, address, Hunter Number and the Limited Entry Hunt assigned, with species, type of animal (i.e. Bulls only, Antlerless only, etc.), season dates and the odds of being drawn on the first choice. Also printed on the authorizations are any special hunt conditions that must be followed. These authorizations are immediately mailed to the applicants. In some cases, special instructions or requests for information from the hunter, such as tooth return envelopes, may be included with the authorization at the time of mailing.

This form is divided into three equal sized sections, one above the other. Authorizations are printed first and unsuccessful notices are printed below. If an applicant was drawn for a bison and a moose but was unsuccessful for a goat and a sheep, they would receive a form with their bison authorization printed in the top third, their moose authorization printed in the middle third and their unsuccessful notice for goat and sheep printed in the bottom third.

After all this effort, it is disappointing to have a number of Limited Entry Authorizations returned by the Post Office as undeliverable. This occurs because hunters have moved, have not informed the Wildlife Branch of their new address and have not left a forwarding address. Although Branch personnel make every effort to locate hunters, often these authorizations can only be placed in a special file waiting inquiry from the hunter.

Previously, unsuccessful notices were sent out to hunters who were not successful in the draw. Now hunters can check their own results online using their hunter # at this link: <a href="http://www.env.gov.bc.ca/fw/wildlife/hunting/resident/leh.html#Status">http://www.env.gov.bc.ca/fw/wildlife/hunting/resident/leh.html#Status</a>.

### LIMITED ENTRY HUNTERS PARTICIPATE IN WILDLIFE MANAGEMENT

Following a Limited Entry Hunt, each hunter possesses information vital to the management of the species they were hunting. Almost all successful Limited Entry applicants are contacted by mail after their hunting season is over. This special questionnaire provides wildlife managers with important information on the success of Limited Entry hunts, to be utilized in the preparation of the following year's Limited Entry regulations. Failure of hunters to return questionnaires or other information requested at the time they receive their authorizations may result in

regulations for following hunting seasons being somewhat more conservative than would otherwise be necessary.

Receipt and processing of returned questionnaires and provision of results to wildlife managers bring the cycle of LEH back to its starting point for another year with the formulation of seasons and regulations.