

11

AN ANALYSIS OF RECIDIVISM AMONG INMATES RELEASED  
FROM THE FORESTRY CAMPS

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Publication No. 630  
March, 1967

## Introduction

Since 1952, the Massachusetts Department of Correction has opened three forestry camps in different State Forest Reservations of the Commonwealth. These camps are minimum security institutions, each of which has the capacity for approximately fifty men. Men are not committed to the camps directly from the courts, but are transferred from other correctional institutions after a careful screening process. Placement at the camp is voluntary inasmuch as only those men who express a desire to be transferred are screened. Also, an inmate always has the option not to accept his camp assignment.

Eligibility for the camps is determined partly by statutory and partly by non-statutory criteria. The law specifies that some types of offenders cannot be transferred to the camps--e.g. those serving life sentences and those convicted of certain sex offenses. Other factors which influence transfer decisions include physical condition, work and prison records, escape history, length of sentence remaining, quality of family ties, and record of narcotic offenses.

Once assigned to the camps, men become employed in "reforestation, maintenance, and development of state forests".<sup>1</sup> This enterprise includes such tasks as clearing forests, building and repairing roads, cutting and hauling timber, fighting forest fires, making tables, benches, and fireplaces for roadside rest areas and state parks, and performing other useful and necessary duties in the State Reservations.<sup>2</sup> Currently, the number of men at the camps represents about 8% of the total male inmate population. (This percentage is based on the weekly population count of January 14, 1967, and does not include those committed to MCI-Bridgewater.)

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<sup>1</sup>General Laws of Massachusetts, Chapter 127, Section 83A - 83D; Chapter 125, Section 1

<sup>2</sup>Edwin Powers, The Basic Structure of the Administration of Criminal Justice in Massachusetts. Boston: The Commonwealth of Massachusetts, Department of Correction, 1964, p. 85

The primary goal of this study is to evaluate the forestry camp program, using recidivism as the yardstick for measuring the impact of the program. By applying the Base Expectancy Categories derived in earlier studies,<sup>3</sup> it is possible to project an expected recidivism rate for the camp inmates, based upon the type of inmate who was transferred to the camp and the institution from which he was transferred. Then by comparing the actual recidivism rate with the expected rate it will be possible to provide some indication of the effectiveness of the camp program--at least in terms of reducing recidivism.

The reason for deriving the expected recidivism rate is to control for the influence of a selective factor. That is, it may be found that the camps have a recidivism rate that is significantly lower than the rates of the other institutions. However, it may also have been true that those inmates least likely to become recidivists were the ones who were selected to go to the camps in the first place. Thus, the lower recidivism rate of the camps may be more a reflection of this selective process than of the impact of the camp program. It is possible to control for this problem to some extent by using the expected recidivism rate derived from the Base Expectancy Categories, since these categories will take into account the type of individual who is sent to the camps.

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<sup>3</sup>Ralph Metzner and Gunther Weil, "Predicting Recidivism: Base Rates for Massachusetts Correctional Institution, Concord", J. Criminal Law, Criminology, and Police Science (September, 1963) pp 307-316

Francis J. Carney, "Predicting Recidivism in a Medium Security Correctional Institution", J. Criminal Law, Criminology, and Police Science (forthcoming)

"Predicting Recidivism in a Maximum Security Institution: Some Emerging Generalizations", Department of Correction, mimeographed (October, 1966)

### Method

The Sample. The sample consisted of all inmates released from the Plymouth and Monroe Forestry Camps between December 1, 1959 and November 30, 1962. This time period was chosen so that a four year follow-up period, consistent with prior recidivism studies, could be maintained. As a result, no data were collected on the third forestry camp, Warwick, since it was not opened until 1964.

The total number of inmates released from the camps to the community during this period was 268. Of these, six inmates were dropped from the sample because they were known to have died during the four year follow-up period. Therefore, 262 subjects were studied in this analysis.

A statistical profile of the sample is presented in Appendix A. The mean age at the present incarceration was 27.6. 240 (91.6%) were white and 22 (8.4%) were Negro. The mean educational level was 8.8 grades, while 18 (6.9%) had been enrolled in special classes. In terms of marital status, 116 (44.3%) were married at the time of incarceration; 104 (39.7%) were single; 42 (16.1%) were divorced, separated or widowed.

With respect to criminal history, 186 (71.0%) had served a prior penal commitment. (This includes juvenile commitments.) The mean number of prior arrests was 8.8, with 180 (68.7%) having 5 or more prior arrests. Slightly over half the sample (51.5%) were 16 or younger at their first arrest. It is important to note that on these three salient variables, the forestry sample did not differ significantly from the general adult male population as derived from samples of inmates from Walpole, Norfolk, and Concord. Thus, the criminal histories of the forestry camp inmates were similar to those of the overall adult male population at least insofar as they are measured by the three variables above.

Turning to the offense for which incarcerated, 127 (48.5%) were imprisoned for offenses vs. person; 115 (43.9%) for offenses vs. property; and 20 (7.6%) for technical parole violations. 132 (50.4%) subjects were transferred to the camps from

Norfolk; 80 (30.5%) from Concord; and 50 (19.1%) from Walpole. The 144 subjects released from Plymouth made up 55% of the sample, while the 118 from Monroe represented 45% of it. On the average, inmates spent 10 months, six days at the camps, and 11 months, 1 day in the other correctional institution(s). Thus, the overall average length of present incarceration was 1 year, 9 months, 7 days. The vast majority of those released from the camps were paroled (93.9%).

Of the variables analyzed, the forestry sample was significantly different from a sample of the general adult male population on only four factors; race, behavior disorders (i.e. 2 or more arrests for drunkenness, or one or more arrests for narcotic offenses), proportion of parole violators, and type of release. In terms of race, not quite one out of ten inmates (8.4%) released from the camps were non-white, while about one out of five (21.0%) released from the other male institutions were non-white ( $\chi^2 = 21.42$ ,  $df = 1$ ,  $p < .001$ ). This difference may be explained in part by the fact that inmates with narcotic offenses on their record are not transferred to the camps. In the Walpole study 86.4% of the narcotic offenders were non-white.

This transfer policy probably also accounts for the difference with respect to behavior disorders. Since no known narcotic offenders are assigned to the camps, the proportion of those with behavior disorders would be expected to be smaller among the camp sample. It was found that 35.8% of the general population manifested behavior disorders, while only 27.9% of the camp sample were so categorized ( $\chi^2 = 5.63$ ,  $df = 1$ ,  $p < .02$ ).

The other two variables on which the camp sample was significantly different were related to parole. First, in terms of the offense for which incarcerated, only about 1 out of 13 (7.6%) were parole violators in the camp sample, while 1 out of 5 (20.0%) were parole violators in the general sample ( $\chi^2 = 21.61$ ,  $df = 1$ ,  $p < .001$ ). Second, with respect to type of release, 93.9% of the camp sample were released on parole, as opposed to 74.3% of the overall sample ( $\chi^2 = 46.05$ ,  $df = 1$ ,  $p < .001$ ).

It should be noted that this profile of camp inmates is based only on those released to the community from the camps. It is, therefore, not necessarily an accurate description of those selected for transfer to the camps, inasmuch as a substantial number was returned to the institutions from the camps for failure to adjust or for medical reasons.

Definition of Recidivism. Of crucial importance in this study is the definition of recidivism. For this study any subject who was returned to a Federal or State Prison, or to a County House of Correction or jail for 30 days or more was counted as a recidivist. The follow-up period was four years from the date of the subject's release. This definition of recidivism, as well as the length of the follow-up period, is consistent with all of the recent recidivism studies done by the Department of Correction.

It should be emphasized that the above definition of recidivism includes a wide range of behavior in terms of the seriousness of the activity for which a subject is re-incarcerated. For example, a person may be returned for a technical parole infraction (e.g. indiscreet conduct, associating with another parolee) or for the commission of a major felony. Therefore, in presenting the findings of this study, an attempt will be made to discriminate among the recidivists according to the seriousness of activity involved.

The source of data on recidivism was the records of the Department of Correction and of the Board of Probation.

Statistical Analysis. As noted above, the basic statistical technique used in this analysis was to derive the expected recidivism rate for the forestry sample and to compare it to the actual rate. In order to derive the expected rate, the sample was divided into three groups, according to the three institutions from which the subjects were transferred to the camps--i.e. Norfolk, Concord, and Walpole. The the Base Expectancy Categories of the appropriate sending institutions were applied to the three groups. By this procedure each of the three groups were

broken down into several subcategories each with a different recidivism rate. The next step was to multiply the number in each category by the corresponding recidivism rate. These products were then summed for each of the three groups and the sums were divided by the total number in the group. According to this technique, the expected recidivism rates for inmates transferred from Norfolk, Concord, and Walpole were projected. The overall expected recidivism rate for the forestry sample were derived by multiplying the total number transferred from each of the three sending institutions by its corresponding expected recidivism rate and then dividing the sum of these three products by the total number in the forestry sample.

One word of caution about the expected recidivism rate. It tends to be a rather gross estimate of what the recidivism rate at the camps should be. One reason is that the Base Expectancy Categories themselves - from which the expected rates are derived - are not extremely refined predictive devices. Further, the overall expected rate must first be calculated for those transferred from each of the three sending institutions. A problem that arises is that when the sample is divided into these three groups, the number in each of them becomes rather small. As a result, it may be possible for a few atypical subjects to affect the reliability of the expected rate. Nevertheless, despite its limitations, the expected rate is felt to be a more meaningful comparative measure than the actual rate of those released from the sending institutions, since it does control to some extent for the type of inmate transferred.

#### FINDINGS

The actual recidivism rate of the forestry sample was found to be 52.3%, while the expected rate was 57.7% (Table I). Although the difference between the two rates is not statistically significant at the accepted level, it is in a favorable direction and it does come close to significance ( $\chi^2 = 3.15$ ,  $df = 1$ ,  $p < .10$ ). In order to refine somewhat the analysis of recidivism, and to

examine more closely the relationship between the actual and the expected return rates, cross tabulations were calculated in terms of the camp from which subjects were released and the institution from which they were transferred. These data are presented in Tables II through VI.

Table II indicates that the actual return rate of those released from Monroe (58.5%) was almost exactly what was expected (58.9%). The Plymouth recidivism rate, on the other hand, was significantly lower than expected. Whereas 56.8% of those released from Plymouth were expected to return, only 47.2% actually did become recidivists ( $\chi^2 = 5.47$ ,  $df = 1$ ,  $p < .01$ ). Since the expected return rates of Plymouth and Monroe are so similar, the difference in their actual recidivism rates may lend itself to at least two interpretations. The first is that Plymouth actually has a more effective program in terms of reducing recidivism. The second is that there may be a selective factor operating that is not controlled in the derivation of the expected recidivism rates. More will be said about these alternative explanations in the discussion below.

In Table III, recidivism data are presented according to the institution from which subjects were transferred. This table shows that for all three institutions, the actual rates are lower than the expected rates, although only the difference for Walpole transfers approaches significance.

It is interesting to note that the three expected recidivism rates in this table are quite similar. This would seem to indicate that - despite the differences in the three sending institutions - the groups transferred from each of them are very much like each other in terms of the probability for recidivism.

In Table IV, the expected recidivism rates of those assigned to the camps are compared with the general return rates of the institution from which they were transferred. The expected rates of the Norfolk and the Concord transfers are very close to the overall rates of Norfolk and Concord respectively. For the Walpole transfers, however, the expected rate (57.5%) was somewhat lower than the general



rate of those released from Walpole (67.1%). Therefore, the Walpole transfers tend to be somewhat better recidivism risks than those who remain at Walpole, but they are not much different from the Norfolk and Concord transfers with respect to the likelihood for recidivism.

Perhaps the most salient aspect of Table IV is that the data in it strongly indicate that the forestry sample in general does not differ very much at all from the non-forestry group in terms of the probability for re-incarceration. The total expected return rate for the camp sample was 57.7%, while the combined rate for the three sending institutions was 59.5% ( $\chi^2 = .38$ ,  $p < .70$ ). A discussion of this similarity will be presented below.

Tables V and VI present the recidivism data for each of the two forestry camps according to the institutions from which men were transferred. Perhaps the most striking finding in these two tables is the difference in the recidivism rates of the Walpole transfers released from Plymouth and their counterparts released from Monroe. The Walpole-Plymouth inmates had an actual recidivism rate that was significantly lower than the expected rate (Table V), while the actual rate of the Walpole-Monroe inmates was somewhat higher than what was expected (Table VI). Whereas only about one out of three (34.4%) of the Walpole-Plymouth men were recidivists, as many as two out of three (66.7%) of the Walpole-Monroe men were recidivists. This difference in the actual return rates of the two groups is also statistically significant ( $\chi^2 = 4.84$ ,  $df = 1$ ,  $p < .05$ ). This finding is even more impressive in view of the fact that the expected recidivism rates of these two groups are almost identical.

#### Types of Recidivists

As noted in the introduction, the term recidivism encompasses a wide range of behavior in terms of the degree of the seriousness of the activity that is involved. In this section an attempt will be made to make some gross distinctions among the various types of behavior which fall under the blanket term, recidivism. Table VII points out that the 137 recidivists were incarcerated a total of 191

times during the 4 year follow-up period. Of these 191 incarcerations, 106 (55.5%) were for parole violations, 63 (33.0%) were new commitments to state or federal correctional institution - i. e. these men were convicted of a new felony - and 22 (11.5%) were new commitments to Houses of Correction - i. e. for misdemeanors or for felonies not considered serious enough for a state prison commitment.

In Table VIII the length of time before the first re-incarceration for the 137 recidivists is presented. When the recidivists from the forestry camps were compared to the sample of recidivists drawn from the overall prison population - i. e. the samples used in the Base Expectancy Studies - it was found that those released from the camps tended to stay out significantly longer than those released from the other institutions. Only 46.7% of the forestry recidivists were re-incarcerated within one year of their release, while 61.1% of the overall recidivists were returned within this period ( $X^2 = 9.05$ ,  $df = 1$ ,  $p < .01$ ). However, it should be noted that it is not possible to determine to what extent this difference reflects the impact of the camp program or the operation of a selective factor, or both. The problem here is that it was impossible to derive the expected proportion of recidivists who would be re-incarcerated within one year based on the type of inmates assigned to the camps - as was done for the expected recidivism rate\*.

In Table IX the focus is on the degree of seriousness of the activity which resulted in the first re-incarceration for the 137 recidivists. In determining the degree of seriousness, parole violations and House of Correction commitments were considered to be sui generis less serious inasmuch as neither involves a new federal or state prison commitment. For those who did have a new federal or state prison commitment, the hierarchy of offenses used by the F.B.I. was employed.

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\*This would have been possible by running a successive dichotomization on the recidivists alone - i.e. those returned within a year vs. those returned after a year or longer. However, the researchers who did the Concord study did not leave a set of their data with the Department of Correction so this kind of analysis was impossible.

Table IX shows that only 3.8% of the sample were re-incarcerated for an offense more serious than that for which they had been previously committed. This proportion appears to be quite low. Unfortunately, this kind of data was not available for the general population so that no comparison could be made.

### Discussion

In general, the findings of this study were favorable. First, the recidivism rate of the forestry sample was somewhat lower than expected. In fact, the Plymouth rate was significantly lower than expected. Second, those who became recidivists tended to stay out significantly longer than recidivists from the three major institutions. Finally, the proportion of those who were re-committed for an offense more serious than that for which they were originally incarcerated appeared to be quite low.

On the other hand, a return rate of 52.3% may seem rather high, especially since the camps are minimum security institutions and men are carefully screened before transfer. However, it is important to realize that men are selected for the camps on the basis of a judgment as to how they will adjust to the camp routine. This does not necessarily mean that the best risks in terms of recidivism are sent to the camps. In fact, the data of this study strongly suggest that, as a group, those released from the camps are not significantly more or less likely to become recidivists than those released from the three major institutions. One indication of this is the finding that the forestry sample did not differ significantly from the overall sample of those released from the other institutions with respect to those variables which are most highly predictive of recidivism - i.e. criminal record and age at present incarceration. Secondly, the expected recidivism rate of the camp sample - 57.7% - was quite similar to the combined rate of those released from the main institutions - 59.5%.

One explanation for the similarity between the forestry sample and the overall sample in terms of the probabilities for recidivism is the fact that probability for recidivism per se is not a crucial consideration for transfer.

While it is likely that a correlation exists between the board's ideal criteria for selection and the likelihood of recidivism, other factors intervene which prevent the transfer criteria from being implemented in an ideal manner. Generally, these intervening contingencies serve to limit the number and types of inmates who maybe considered for assignment to the camps. At least one of these factors has rather clear implications for the recidivism rate of the camps. The others to be mentioned clearly influence the selection process, and accordingly may influence the recidivism rate.

One crucial factor that affects the selection of forestry transfers and, ultimately, the recidivism rate of the camps is the statute which declares sex offenders ineligible for assignment to the camps. For, in the sample of each of the three sending institutions, the sex offenders had the lowest recidivism rate of all types of offenders studied. The return rate of the 93 sex offenders in the overall sample was only 29.0%. This is particularly striking inasmuch as the return rate of all other offenders was 63.3%. Therefore, the law which excludes sex offenders from the camps probably has the effect of inflating the recidivism rate at the camps. Conversely, it tends to have a lowering effect on the return rate at the other institutions.

Several other contingencies affect the selection of men for forestry placement. Important among these is the fact that only those who volunteer are considered for transfer. Since there is little active recruitment, it is not unlikely that some of the best prospects for the camps never come before the transfer board.

This problem is compounded by the pressure to keep the camps relatively full, simply in order to justify their existence in terms of economic considerations. The combination of this pressure to keep the camps near capacity along with the dependence on volunteers creates a situation in which the degree of selectivity is inevitably lowered.

Other kinds of pressures also influence the selection of men for the camps. One area where these pressures become manifest is that of institutional needs. For example, a forestry camp may need a man who has a particular talent - e.g. a cook, a barber, a carpenter. However, the man with the needed talent may not measure up to the standards for transfer in other respects. What is likely to happen, then, is that institutional needs will take precedence over other considerations and the man will be transferred.

By the same token, an inmate in the sending institution may have a specific skill that is valuable to the institution. He may be encouraged not to apply for transfer to the camps even though he is an excellent prospect. Thus, the catering to institutional needs has a dual impact on the selection process for forestry transfer.

Another factor that affects transfer decisions is the amount of time that an inmate has to serve before parole or discharge. Usually, a man must have at least four or five months remaining in order to be considered for transfer. Therefore, in some instances an otherwise well qualified inmate might never have the opportunity to be assigned to a camp. This factor is especially relevant at Concord where many inmates are eligible for parole in one year.

The above issues illustrate some of the ways in which the transfer board is limited in selecting men for the forestry camps. One other factor related to the selection of forestry transfers should be discussed - i.e. the geographical location of the two camps. Monroe is located in the Berkshire Mountains some 140 miles from Boston. It is not readily accessible to the large urban centers of the state where most of the inmates and their families live. Plymouth, on the other hand, is about 50 miles from Boston and is more easily reached because of its relative closeness to the large cities and because of the excellent roads leading to it.

One implication of this geographical factor is that the Plymouth inmates receive many more visits than the Monroe inmates. It has been estimated by the superintendents at the respective camps that the Plymouth inmate averages slightly more than two

visitors per weekend, while the Monroe inmate averages about one visitor per month.

It is not altogether clear whether a man receives relatively few visits because he is sent to Monroe, or he is sent to Monroe because he received relatively few visits in the sending institution. However, it seems more probable that the latter is the case. That is, the transfer board is more likely to send a man with close family or community ties to Plymouth rather than Monroe since it is more accessible for visitors. Conversely, men with weak ties or no ties at all would be more likely to be transferred to Monroe since it would generally be rather difficult for interested people to visit them. At any rate, no matter how this difference in the number of visitors is interpreted, it is felt that this factor may contribute to the difference in recidivism rates at the two camps.

#### SUMMARY

The recidivism rate of 262 men released from the Plymouth and the Monroe forestry camps was compared with their expected recidivism rate as derived from the Base Expectancy Categories. The overall return rate was lower than expected - although not quite at a statistically significant level. The recidivism rate of the Plymouth men was significantly lower than expected, while that of the Monroe men was almost exactly what was expected. A suggested interpretation of this interesting finding involved the interrelationship between the accessibility of the camps to the urban areas of the state, the number of visits received by inmates at the two camps, and the decision regarding the assignment of a man to one of the two camps. However, it is felt that further research is needed in this area, especially since a third forestry camp has been opened. It is possible that such research may have implications for the question of what is the optimal number of forestry camps that a correctional system should have.

This study also revealed that the recidivists from the forestry camps stayed out significantly longer than those from the three major institutions. Unfortunately, it was not possible to determine the extent to which this difference was due to the program of the minimum security camps or to the operation of a selective factor -

i.e. that those transferred to the camps would be the type of inmates most likely to stay out longer.

Finally, the proportion of those released from the camps who were re-incarcerated for an offense more serious than their original commitment seemed to be strikingly low. However, there were no data available with which to compare this finding.

In terms of future research, this study spotlights the need to tap other dimensions related to recidivism besides the return to a correctional institution per se. Further investigation into the length of time before re-incarceration, the degree of seriousness of the activity for which re-incarcerated, and the type of institution to which returned would all serve to clarify the issues pursued in this paper. Another area for future study might include an analysis of those subjects who were returned from the camps to the major institutions for failure to adjust. A comparison of this group with those who are released from the camps might reveal some factors which are related to success and failure with respect to adjustment to the camp routine. Finally, it would seem worthwhile to derive the base expectancy categories for those released from the camps. This would give an indication of the type of inmate who is most likely (or least likely) to benefit from the camp program. Ultimately, such information might aid the process of selecting inmates for transfer to the forestries.

Table IOverall Recidivism Rate

	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Expected Recid. Rate</u>	Differences bet. Actual & Ex. Recid. Rates
Non-Recidivists	125	(47.7)			
Recidivists	137	(52.3)	52.3%	57.7%	$\chi^2=3.15, p < .10$
Total	262	(100.0)			

Table IICamp From Which Released

<u>Camp</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Expected Recid. Rate</u>	Differences bet. Actual & Ex. Recid. Rates
Plymouth	144	(55.0)	47.2%	56.8%	$\chi^2=5.47, p < .01$
Monroe	118	(45.0)	58.5%	58.9%	$\chi^2= .01, p < .95$
Total	262	(100.0)	52.3%	57.7%	

Table IIIInstitution From Which Transferred

<u>Institution</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Expected Recid. Rate</u>	Differences bet. Actual & Ex. Recid. Rates
Norfolk	132	(50.4)	54.5%	56.9%	$\chi^2= .31, p < .70$
Concord	80	(30.5)	52.5%	59.3%	$\chi^2=1.51, p < .30$
Walpole	50	(19.1)	46.0%	57.5%	$\chi^2=2.71, p < .10$
Total	262	(100.0)	52.3%	57.7%	



Table IV

A Comparison of the Recidivism Rates of the Sending Institutions  
and the Expected Rates of Those Transferred from the Sending  
Institutions

<u>Institution</u>	<u>Actual Rate of</u> <u>Sending Institution</u>	<u>Expected Rate</u> <u>of Those Transferred</u>	<u>Diff. bet Actual</u> <u>and Ex. Recid. Rates</u>
Norfolk	54.5%	56.9%	$X^2 = .31, p < .70$
Concord	61.5%	59.3%	$X^2 = .17, p < .70$
Walpole	67.1%	57.5%	$X^2 = 2.18, p < .20$
Total	59.5%	57.7%	$X^2 = .38, p < .70$

Table V

Plymouth Recidivism Rate According To Institution From Which Transferred

<u>From:</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Expected Recid. Rate</u>	<u>Differences bet.</u> <u>Actual &amp; Ex.</u> <u>Recid. Rates</u>
Norfolk	82	(56.9)	50.0%	55.4%	$X^2 = .96, p < .50$
Concord	30	(20.8)	53.3%	59.7%	$X^2 = .52, p < .50$
Walpole	32	(22.2)	34.4%	57.8%	$X^2 = 7.21, p < .01$
Total	144	(99.9)	47.2%	56.8%	

Table VI

Monroe Recidivism Rate According To Institution From Which Transferred

<u>From:</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Expected Recid. Rate</u>	<u>Differences bet.</u> <u>Actual &amp; Ex.</u> <u>Recid. Rates</u>
Norfolk	50	(42.4)	62.0%	59.3%	$X^2 = 1.40, p < .30$
Concord	50	(42.4)	52.0%	59.0%	$X^2 = 1.01, p < .50$
Walpole	18	(15.3)	66.7%	57.2%	$X^2 = .66, p < .50$
Total	118	(100.1)	58.5%	58.9%	

Table VII

Total No. of Re-incarcerations Within 4 Years of Release for the 137 Recidivists

<u>Type</u>	<u>N</u>	<u>%</u>
Parole Violations	106	(55.5)
New State or Federal Commitments	63	(33.0)
New House of Correction Commitments	22	(11.5)
Total	191	(100.0)

Table VIII

Length of Time Before First Reincarceration

	<u>Parole Violations</u>	<u>New State or Fed. Comms.</u>	<u>New House of Corr. Comms.</u>	<u>Total</u>	<u>Cum. %</u>
Within 6 months	19 (26.4)	11 (22.4)	0 (0.0)	30 (21.9)	21.9%
6 mos. up to 1 yr.	18 (25.0)	16 (32.7)	0 (0.0)	34 (24.8)	46.7%
1 yr. up to 1 yr., 6 mos.	16 (22.2)	10 (20.4)	1 (6.2)	27 (19.7)	66.4%
1 yr., 6 mos. up to 2 yrs.	6 (8.3)	3 (6.1)	7 (43.8)	16 (11.7)	78.1%
2 yrs. up to 2 yrs., 6 mos.	5 (6.9)	3 (6.1)	3 (18.8)	11 (8.0)	86.1%
2 yrs., 6 mos. up to 3 yrs.	2 (2.8)	4 (8.2)	3 (18.8)	9 (6.6)	92.7%
3 yrs. up to 3 yrs., 6 mos.	3 (4.2)	1 (2.0)	1 (6.2)	5 (3.6)	96.3%
3 yrs., 6 mos. up to 4 yrs.	3 (4.2)	1 (2.0)	1 (6.2)	5 (3.6)	99.9%
Total	72 (100.0)	49 (99.9)	16 (100.0)	137 (99.9)	

Table IX

Degree of Seriousness of the Activity for Which Re-incarcerated

<u>Description</u>	<u>N</u>	<u>%</u>	<u>Cum. %</u>
State or Federal Commitment			
More serious than Previous Offense	10	(3.8)	3.8%
Same as Previous Offense	22	(8.4)	12.2%
Less Serious than Previous Offense	17	(6.5)	18.7%
House of Correction Commitment	16	(6.1)	24.8%
Parole Violation	72	(27.5)	52.3%
Not Returned	125	(47.7)	100.0%
Total	262	(100.0)	-

<u>Variable</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Difference in Recidivism Rates</u>
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Present Incarceration

1. Type of Offense

Vs. person:

Armed Robbery	65	(24.8)	50.8%	} 49.6%
Unarmed Robbery	38	(14.5)	57.9%	
Manslaughter, Murder (2nd degree)	13	(5.0)	38.5%	
Assault	10	(3.8)	30.0%	
Extortion	1	(0.4)	0.0%	

Subtotal vs. person	127	(48.5)	49.6%
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$x^2 = 4.47$   
 $df = 2$   
 $p < .20$

Vs. property:

Burglary	80	(30.5)	51.3%	} 51.3%
Larceny	14	(5.3)	35.7%	
Common & Notorious Thief	12	(4.6)	50.0%	
Forging and/or Uttering	4	(1.5)	100.0%	
Operating m. v. w/o authority	5	(1.9)	60.0%	

Subtotal vs. property	115	(43.9)	51.3%	} 75.0%
Technical Parole Violations	20	(7.6)	75.0%	

TOTAL	262	(100.0)	52.3%
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2. Camp from which Released

Plymouth	144	(55.0)	47.2%
Monroe	118	(45.0)	58.5%

$x^2 = 3.29$   
 $df = 1$   
 $p < .10$

3. Institution from which Transferred

Norfolk	132	(50.4)	54.5%
Concord	80	(30.5)	52.5%
Walpole	50	(19.1)	46.0%

$x^2 = 1.05$   
 $df = 2$   
 $p < .70$

TOTAL	262	(100.0)	52.3%
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## Appendix A

### A Statistical Profile of the Forestry Sample Including Data on Recidivism

<u>Variable</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Difference in Recidivism Rate</u>
<b>A. <u>Background Factors</u></b>				
<b>1. <u>Age at Present Incarceration</u> (The average age was 27.6.)</b>				
Under 20	39	(14.9)	46.2%	53.1% $x^2 = .052$ $df = 1$ $p < .90$
20 - 24	74	(28.2)	56.8%	
25 - 29	51	(19.5)	54.9%	
30 - 34	46	(17.6)	43.5%	
35 - 39	28	(10.7)	53.6%	
40 or older	24	( 9.2)	58.3%	51.7%
<b>2. <u>Race</u></b>				
White	240	(91.6)	52.2%	$x^2 = .005$ $df = 1$ $p < .95$
Negro	22	( 8.4)	50.0%	
<b>3. <u>Education</u> (The average education was 8.8 grades)</b>				
6th grade or less	28	(10.7)	46.4%	61.9% $x^2 = 4.22$ $df = 2$ $p < .20$
7th grade	35	(13.4)	74.3%	
8th grade	49	(18.7)	46.9%	
9th grade	57	(21.8)	50.9%	
10th - 11th grade	52	(19.8)	50.0%	
high school graduation	23	( 8.8)	39.1%	48.1%
special classes	18	( 6.9)	61.1%	
			61.1%	61.1%
<b>4. <u>Marital Status</u></b>				
Single	104	(39.7)	50.0%	$x^2 = 1.85$ $df = 2$ $p < .50$
Married	116	(44.3)	59.0%	
Div., Sep., Wid.	42	(16.0)	61.9%	
TOTAL	262	(100.0)	52.3%	

<sup>1</sup> Chi-squares were calculated on the grouped recidivism rates.

\* Indicates a statistically significant difference in recidivism rates.

<u>Variable</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Difference in Recidivism Rates</u>
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B. Criminal History

1. Age at First Arrest\*

12 and Under	38	(14.5)	68.4%	60.0%	$x^2 = 6.64$ $df = 1$ $p < .02$
13 - 16	97	(37.0)	56.7%		
17 - 20	86	(32.8)	47.7%		
21 and Over	41	(15.6)	36.6%		

2. Number of Prior Arrests\* (The average number of prior arrests was 8.8)

None	15	(5.7)	20.0%	32.9%	$x^2 = 17.94$ $df = 1$ $p < .001$
1 - 4	67	(25.6)	35.8%		
5 - 9	80	(30.5)	52.5%		
10 - 14	46	(17.6)	56.5%		
15 - 19	36	(13.7)	75.0%		
20 or More	18	(6.9)	83.3%		

3. Number of Drunkenness Arrests\*

None	147	(56.1)	44.9%	44.9%	$x^2 = 7.34$ $df = 1$ $p < .01$
1	42	(16.0)	50.0%		
2 or More	73	(27.9)	68.5%		

4. Prior Incarcerations\*

State or Federal	100	(38.2)	60.0%	61.8%	$x^2 = 23.38$ $df = 1$ $p < .001$
House of Corr. only	76	(29.0)	64.5%		
Juvenile only	10	(3.8)	60.0%		
None	76	(29.0)	28.9%		

TOTAL	262	(100.0)	52.3%
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<u>Variable</u>	<u>N</u>	<u>%</u>	<u>Recidivism Rate</u>	<u>Difference in Recidivism Rates</u>
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4. Time at Camp\* (The average stay at the camps was 10 mos., 6 days.)

Less than 5 mos.	37	(14.1)	54.1%	57.1%	$x^2 = 9.99$ $df = 1$ $p < .01$
5 - 7 mos.	83	(31.7)	55.4%		
8 - 10 mos.	57	(21.8)	57.9%		
11 - 13 mos.	33	(12.6)	63.6%	32.7%	
14 - 16 mos.	21	( 8.0)	28.6%		
17 mos. or longer	31	(11.8)	35.5%		

5. Total Time Incarcerated\* (The average total time was 1 year, 9 mos., 7 days)

Less than 12 months	81	(30.9)	49.4%	56.9%	$x^2 = 4.41$ $df = 1$ $p < .05$
12 - 16 months	67	(25.6)	61.2%		
17 - 21 months	26	( 9.9)	69.2%		
22 - 26 months	32	(12.2)	37.5%	43.2%	
27 mos. or longer	56	(21.4)	46.4%		

6. Age at Release (The average age at release was 29.4)

Under 20	13	( 5.0)	61.5%	53.4%	$x^2 = .34$ $df = 1$ $p < .70$
20 - 24	82	(31.3)	52.4%		
25 - 29	50	(19.1)	52.0%		
30 - 34	48	(18.3)	54.2%	49.3%	
35 - 39	36	(13.7)	47.2%		
40 or older	33	(12.6)	51.5%		

7. Type of Release

Parole	246	(93.9)	52.8%	$x^2 = .50$ $df = 1$ $p < .50$
Discharge	16	( 6.1)	43.8%	

TOTAL	262	(100.0)	52.3%
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